FUNDAMENTALS
OF
ACCOUNTING

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ROBERT A. LAMBERTON, M. A., C. P. A.

ASSISTANT PROFESSOR OF ACCOUNTING, RUTGERS UNIVERSITY

NEW BRUNSWICK, N. J.

MEMBER OF THE FIRM OF REA, LAMBERTON & CO.

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PREFACE

Another new text, embracing the fundamentals of Accounting! Why?

An exclamation and a question—and why shouldn't the teachers ask such a fair question? In the same fairness I should like to write this preface as a personal note to all teachers of accounting, and trust that after reading it they may feel too that there is a need and a place for another new accounting text.

About twelve years ago I had in mind the preparation of a text which would present the principles of accounting in a simple, clear, concise manner. In 1929 I had copyrighted and privately printed, *Fundamental Principles of Accounting*. The text was intended primarily for my own use at Rutgers University, in the College of Arts and Sciences, but was used also by my colleagues in the evening classes of the Extension Division, in both New Brunswick and Newark. In 1934 the text was revised and enlarged and was privately published in multiprint for use in both the day and evening divisions of Rutgers University, and several junior colleges in New Jersey.

From this use, extending over a period of twelve years, by some ten or more instructors, who presented the materials to many thousands of students, much valuable new material has been compiled. With this wealth of new material and experience, together with valuable suggestions from students and constructive ideas from my teaching associates, it has been a pleasure to prepare this text. It will be observed, therefore, that the text is not an experiment, but rather the perfection of an idea which originated several years ago.

It is my firm belief, after all this experience, that the first-year course in accounting for schools of college grade should be limited to the fundamentals of accounting; that these should be a combination of theory and practice; that each topic should be thoroughly understood before another more advanced topic is studied, and that it is much better to have a limited amount of carefully selected material really mastered by the student than to have a great deal more material presented than the most advanced student would have any hope of mastering.

In order to carry out this program it was first necessary to

decide upon a logical order of presentation, so that each new topic would fit into the unified whole by utilizing the material which had gone before. A second problem was to select carefully the topics which we felt would be best suited for an elementary text. Topics were included which the majority of instructors consulted felt belonged in the first-year course, while those we felt more properly belonged to advanced accounting, cost accounting, or auditing were omitted. We did not believe a six- or seven-hundred page text necessary.

Fundamentals of Accounting may be used equally well as the basic text in courses planned for general students or for the accounting major. It has been used successfully by both groups. To make this possible, more than ample practice problems and theory questions have been geared to the text and placed at the end of each chapter. For optional use a further unified three-unit practice set is provided at the end of the book. The set is so constructed that any unit may be used alone. For general students it is suggested that less emphasis be placed on the problems, while the accounting majors should, if possible, have an accounting laboratory, where all problem material may be covered with a stronger emphasis on technique and the business-like presentation of accounting solutions. Instructors using the text will be provided with a solutions manual.

I trust *Fundamentals of Accounting* may be found useful by many teachers and students. I should welcome any criticism or suggestions for improving the text for use in future editions.

It is a distinct pleasure at this time to thank all those who helped make this book possible, particularly the students and my teaching associates who used the book in its preliminary form. All this assistance has been helpful and encouraging in writing the book.

ROBERT A. LAMBERTON

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CHAPTER I

INTRODUCTION

As the student starts a new course, many questions probably run through his mind; briefly he wonders what it is all about. With this thought in mind, it may be well to present a few ideas regarding the subject about to be studied.

Record keeping is almost as old as man himself. In the archives of history may be found many well preserved records of accounts going back many, many years. It will not be necessary, nor would it be profitable for our present purpose, to trace the development of bookkeeping and accounting down through the years. Modern accounting, now a well recognized science, has a much shorter history. The basic principles of double entry bookkeeping have not changed a great deal since they were first introduced many years ago. Interpretive accounting, modes, system building, and forms of presentation have, however, advanced considerably. Probably the greatest advancement has taken place in the past forty years. During this period there has appeared more accounting literature than ever before. This advancement has been due largely to the advancement in business itself. Years ago competition was not so worldwide and not nearly so keen as it is today. The advancements in science, communication, and transportation have seemed to bring the world closer together. Today many corporations organized as American, British, French, or German corporations are in truth international in scope. Business has seen its greatest development in the past forty years and so has accounting; they both go hand in hand.

THE ACCOUNTING PROFESSION

The accounting profession was first recognized in this country in 1896, when New York State passed a law which regulated the practice of public accounting and granted to those already

established in the practice of public accounting, and to those who might qualify subsequently in accordance with the statute, the designation of Certified Public Accountant. Since that date every state has passed a similar C.P.A. law.

The C.P.A. laws govern only the practice of public accounting. There is at present no legislation, state or national, restricting or governing the practice of accounting in private business.

The requirements, set by the various State Boards of Public Accountants, which usually administer the C.P.A. laws, are different in each state. In brief, however, the law requires certain preliminary general education which now varies from high school graduation to four years of college education, together with a certain period of practice with a recognized firm of Certified Public Accountants. The practice requirement varies from two to five years, and must usually be completed before the candidate may sit for the examination. The examinations, while quite thorough and perhaps difficult in many states, are not considered so difficult by the person who has had the proper education and practice. Probably the principal reason for so many failures in the examinations is the inadequate preparation of many of the candidates examined.

THE WORK OF A PUBLIC ACCOUNTANT

SYSTEM BUILDING

One of the most interesting pieces of work done by the practicing Certified Public Accountant is that of designing an accounting system which will best serve the needs of a particular organization. Each type of business organization will differ, and often individual organizations of the same type may differ. An accounting system must therefore be "custom made" and should be designed so that it will yield the maximum of information with the minimum of effort.

AUDITING

After a system has been placed in operation, it must be constantly supervised to see that the purposes for which it was created are being carried out properly. Auditing, in brief, deals

with the examination and verification of the accuracy of the accounting system, and the financial reports prepared therefrom.

INVESTIGATIONS AND SPECIAL ASSIGNMENTS

The Certified Public Accountant is often engaged by corporations, or designated by the courts, to carry out investigations of various natures. He may prepare accounting for an estate, or records for a Receiver in Bankruptcy, or investigate a closed bank.

TAX-CONSULTANT

Another very important phase of the Certified Public Accountant's work is that which has to do with the federal and state income tax laws. Legislation of this kind requires proper accounting and reporting of income and expense in conformity with the law and regulations. The establishment of the Securities Exchange Commission has also created a great deal of important work for the Certified Public Accountant.

COST ACCOUNTING

Another most interesting field of accounting is that devoted to cost accounting. Many Certified Public Accountants do a great deal of work for manufacturers and often become specialists in this line of work, just as others may specialize in " Wall Street," or " Insurance " accounting. There are, of course, some very fine cost accountants who are not Certified Public Accountants, but they are usually college graduates who have had a combined engineering and accounting training.

MUNICIPAL ACCOUNTING

This branch of accounting also utilizes the services of a specialist. In some states only certain licensed accountants may supervise or audit municipal records. In New Jersey, at the present time, only a " Registered Municipal Accountant," who holds an R.M.A. certificate from the State Board of Public Accountants, may practice in this field.

STUDIES AND TRAINING FOR ACCOUNTING PROFESSION MUST BE BROAD

By now the student has no doubt noticed that, while the field of accounting may be a very interesting one, it is at the same time a very broad field. Perhaps the ideal preparation for success in this profession would be a four-year liberal arts course, followed by a three-year graduate course in Accounting and Business. This preliminary study, in conformity with many state C.P.A. laws, must then be followed by three years' training and practice with some recognized firm of Certified Public Accountants. The majority of students cannot afford all of this preliminary study and so many of our leading universities and colleges are now offering a four-year course which combines the essentials of the general courses and as many technical courses in accounting, law, finance, and economics as is possible. The State of New York now requires, and New Jersey after Jan. 1, 1944, will require, a college course of this description as the minimum preliminary educational qualification for candidates taking the C.P.A. Examinations.

PROFESSIONAL SOCIETIES OF ACCOUNTANTS

The present high position of the accounting profession owes a great deal to the work of many associations of professional accountants. In England and Scotland many professional societies were formed long before any were organized in this country. Many of our first public accountants were Scottish or English "Chartered" accountants who came here as representatives of their firms or to practice as individuals. Our principal national association of certified public accountants is probably the American Institute of Accountants. The National Association of Cost Accountants, with local chapters in the principal cities of the United States, is another very important organization composed of accountants and executives interested in cost accounting. Then there are the very splendid state associations of Certified Public Accountants which exist in most states and which have contributed a great deal to the advancement of the accounting profession. Another national organization which must be mentioned is the present American Ac-

counting Association, formerly the American Association of University Instructors of Accounting. This society has done a great deal to improve the status of the accounting profession.

ACCOUNTANTS NOT CERTIFIED

At this time, however, it might be well to state that all who study accounting need not have in mind entering the public accounting profession, for, as a matter of fact, the great majority of accountants are engaged by business organizations and are classed as private accountants. Many brilliant accountants are engaged in private practice as chief accountants, auditors, controllers, treasurers, and in other similar positions. Many of the men who occupy these positions have come up through the ranks; a few have been drawn from the staffs of public accountants. All of these men have had one thing in common, a thorough training in accounting and business. The beginning student, therefore, should appreciate the value of a good basic course in accounting.

VALUE OF ACCOUNTING STUDY TO THOSE NOT PRIMARILY INTERESTED IN ACCOUNTING

There are many students who do not contemplate entering business; some will study law, some banking, some medicine, while others may study engineering or architecture. Will these students benefit by a study of accounting? Perhaps the best answer will be found if we discuss the relationship which exists between accounting and several of the professions.

LAW AND ACCOUNTING

Practicing attorneys have long recognized the need of some knowledge of accounting, particularly in certain phases of their work. This is particularly true in such fields as corporation law, income tax law, the law of partnerships, trusts, estates, and fiduciary law. All these fields demand a considerable knowledge of accounting and many attorneys recognizing this need have taken courses in accounting after being admitted to practice. Many law schools today specify Accounting Principles as a required pre-law course.

ENGINEERING AND ACCOUNTING

Many engineering schools not only include an elementary accounting course but offer in their course of study Cost Accounting as well. One well known engineering educator has remarked that a good cost accountant must be a good engineer as well as an accountant.

BANKING AND ACCOUNTING

The field of banking is so closely connected with business that a thorough knowledge of business is recognized as an essential part of the education of a banker. The business training, of course, must be broad and include much study in the field of economics and business. An essential part of this training should be a thorough knowledge of accounting. This part is recognized by the bankers, and the American Institute of Banking has included several courses in accounting in its course of study recommended for bank employees who wish to broaden their education. Students who contemplate entering this very interesting field will do well to include the Principles of Accounting in their course of study.

MEDICINE, DENTISTRY, ARCHITECTURE AND ACCOUNTING

Included here are several professions which some students may be preparing for and which group probably has less use for accounting than any other group, in their own professional sphere. However, how often will the successful doctor, dentist, or architect come into contact with business problems? If at all, then a knowledge of accounting might come in handy. Another thought to this last group: from experience we know that many who originally set their goals on some of the professions wind up in business, and all too frequently unprepared; or in their final year of college they scurry about to get into their programs all the business courses they can.

THE PLAN OF THE TEXT YOU ARE ABOUT TO STUDY

Now that some of the questions asked by the beginning student have been answered, it might be well to see how this particular text presents the principles of accounting.

In the first part of the introduction it was stated that, while the fundamentals of accounting had changed little in recent years, certain improvements in use and interpretation had taken place. One of the chief advances of modern times has been in the method of presenting accounting to beginning students. In the early days boys were apprenticed to counting houses and learned by doing, a very long, slow course. The first schools, private business schools, taught by this method. Students were given a high stool at a high bookkeeping desk, red and black ink, actual journals and ledgers, and the instructors (for the most part graduate bookkeepers) dictated long bookkeeping examples and the student learned by doing.

About nineteen hundred, when colleges first started teaching accounting, a more scientific method of teaching was employed. We shall not take any time, however, to trace the several steps in advancement made by the colleges in their study of methods of teaching accounting. The text starts with a study of Financial Statements, the finished product of accounting — statements which are prepared only after all the bookkeeping work of the period has been completed and the ledger closed and balanced. The beginning student might therefore wonder why the text starts here rather than with the origin of the business transaction. The purpose is simple; it is the writer's wish that the students first view the completed product, after which the finished whole will be taken down part by part. After the several parts have been studied and the student has a good idea where each part fits, then he will be ready to build, and the student may be assured that he will build well and efficiently because he will know in advance what he is building. He will have his goal before him in the form of the completed financial statements.

CHAPTER II

THE BALANCE SHEET

PURPOSE OF FINANCIAL STATEMENTS

The successful operation of a business requires a study of financial statements. The *Balance Sheet,* which sets forth the financial condition, and the *Statement of Profit and Loss,* which reviews the operations of the business over a period of time, are financial statements which are as essential to the operation and control of a business, as the barometer, compass, and charts are to the successful navigation of a ship. These statements, when properly prepared, may be of the utmost importance to the management in controlling the affairs of a business.

The grantors of credit in general, as well as banks and business organizations furnishing goods on credit, are also interested in financial statements. A company which can present a set of good financial statements will ordinarily have no trouble in obtaining either a loan or credit.

BALANCE SHEET ILLUSTRATED

The following is a very simple balance sheet prepared from the books of Mr. John H. Thomas:

JOHN H. THOMAS

Balance Sheet as of December 31, 19—

Assets		*Liabilities*	
Cash	$ 2,000.00	Notes Payable	$ 1,000.00
Merchandise Inventory	11,500.00	Accounts Payable	12,000.00
Accounts Receivable	14,000.00	Mortgage Payable	10,000.00
Land	2,000.00	*Total Liabilities*	$23,000.00
Buildings	18,000.00		
Office Equipment	1,500.00	*Net Worth*	
Delivery Equipment	1,000.00	John H. Thomas	27,000.00
Total Assets	$50,000.00	*Total Liab. & N. W.*	$50,000.00

Illustration No. 1

BALANCE SHEET AS OF A PARTICULAR DATE

Note in the example that the balance sheet shows Mr. Thomas' financial condition as of December 31, 19—. This is of considerable importance, for his financial condition might have been, and probably was, different a day before this date and without a doubt will be different each day as time passes. A going business cannot stand still, it must either go forward, as all successful businesses do, or it will go down; it cannot stay in any one position.

THE ACCOUNTING PERIOD

Years ago, when business moved at a much slower pace, and when competition was not so keen, financial statements prepared annually were considered sufficient for all ordinary requirements. Today, however, the business man cannot wait so long to be apprised of the condition of his affairs, and as a result the monthly accounting period is quite widely used at present. Many companies continue to have annual reports made for stockholders and others, but for management purposes demand statements much more frequently.

BALANCE SHEET DEFINED

Briefly, a balance sheet is one of the important financial statements, prepared from a set of books kept on the double entry principle, which exhibits the financial position of an individual or business enterprise at a particular moment of time by means of three elements: assets, liabilities, and net worth.

THE THREE ELEMENTS OF THE BALANCE SHEET

In the definition of a balance sheet it was stated that the financial condition of an individual or a business enterprise was shown by means of three elements. These three elements are classes or types of accounts; namely, assets, liabilities, and net worth. One of the primary purposes of this chapter is to give the student a thorough understanding of these three groups of accounts, together with a knowledge of the relationship which exists between them.

ASSETS DEFINED

An asset may be briefly defined as anything of value owned by the business. On the balance sheet above, several typical assets have been illustrated. Assets consist of property, real and personal. All property owned by the business is listed on the left hand side under the caption *assets*. In this particular balance sheet Mr. Thomas owns assets with a total valuation of $50,000.00.

LIABILITIES DEFINED

A liability is anything owed by the business to creditors other than the proprietor. Several typical liabilities have been given in the balance sheet above and will be sufficient for our illustration at this time. Liabilities may be further defined as the claims of "outsiders" against the assets of the business, or more briefly the creditors' equity in the property of a business.

CAPITAL OR NET WORTH DEFINED

The difference between the first two elements measures the proprietor's *net worth,* and is technically known as *capital,* although the former term is much more descriptive and therefore preferable to the older term, capital. Another term sometimes used to measure this difference is *proprietorship.*

In a sole proprietary business the net worth is simply labeled with the proprietor's name, as in Illustration No. 1.

NET WORTH IN A PARTNERSHIP

In a partnership the net worth section will be represented by the capital accounts of two or more partners.

Brown and Green Partnership

Balance Sheet as of October 1, 19—

Assets		*Liabilities*	
Cash	$ 6,000.00	Accounts Payable	$ 8,000.00
Accounts Receivable	12,000.00	Notes Payable	2,000.00
Notes Receivable	3,000.00	Mortgage Payable	15,000.00
Land	10,000.00	*Total Liabilities*	$25,000.00
Buildings	30,000.00		
Sundry Accounts	4,000.00	*Net Worth*	
		John Brown Capital	$18,000.00
		Thomas Green Capital	22,000.00
Total Assets	$65,000.00	*Total Liab. & N. W.*	$65,000.00

Illustration No. 2

In this illustration the partnership has a net worth of $40,000.00. This is divided, however, between the partners as indicated above.

NET WORTH IN A CORPORATION

On a corporation balance sheet the net worth will be made up usually of the capital stock accounts plus a surplus or minus a deficit.

Excelsior Manufacturing Co., Inc.

Balance Sheet as of December 31, 19—

Assets		*Liabilities*	
Cash	$ 25,000.00	Accounts Payable	$ 40,000.00
Notes Receivable	10,000.00	Notes Payable	20,000.00
Accounts Receivable	60,000.00	Sundry Liabilities	50,000.00
Inventories	100,000.00	*Total Liabilities*	$110,000.00
Land, Buildings, & Sundry Assets	135,000.00	*Net Worth*	
		Capital Stock	$200,000.00
		Surplus	20,000.00
Total Assets	$330,000.00	*Total Liab. & N. W.*	$330,000.00

Illustration No. 3

In this illustration the corporation has a net worth of $220,000.00. This, however, belongs to the stockholders rather than to any one individual. The $200,000.00 represents 2000 shares of stock, assuming a $100.00 par value. The excess of net worth over the stock outstanding represents a *surplus*. If the net worth of the corporation were less than the $200,000.00 worth of capital stock, then there would be a *deficit* and this would appear as a deduction from the capital stock account in order to balance the total assets on the opposite side.

THE FUNDAMENTAL EQUATION OF THE BALANCE SHEET

From the foregoing illustrations it will be noted that in every instance the total assets were always equal to the total liabilities plus net worth. This truth may be set forth in the form of an equation:

$$\text{Assets} = \text{Liabilities} + \text{Net Worth}$$

Or perhaps in a more usable form, we may say:

$$\text{Assets} - \text{Liabilities} = \text{Net Worth}$$

This is frequently spoken of as the fundamental equation of the balance sheet. It may be reduced to its simplest form:

$$\text{A} - \text{L} = \text{NW}$$

ASSETS EQUAL OWNERSHIP: LIABILITY AND NET WORTH DISTINGUISHED

The property belonging to a business — the assets — are listed on the left hand side of the balance sheet, while the owners' equities — the liability and net worth accounts — are listed on the right hand side of the balance sheet. In a sole proprietary business the owner has physical control as well as ownership of the property. His claim to the assets, however, is secondary to the claim of the creditors. In case of financial difficulty, such as insolvency or bankruptcy, the creditors would have to be paid one hundred cents on the dollar before the proprietor could claim one cent. Further, if in liquidation of the assets there were not enough cash to pay the liabilities (creditors) in full, then the proprietor would have to turn over as

much personal property as required by the receiver in order to be discharged in bankruptcy.

This unlimited liability of the proprietor, or partners in a partnership, for the debts of their business is one of the serious drawbacks of these forms of business organization. In a corporation, on the other hand, while the stockholders' (owners of the net worth) claims are also secondary to the claims of the creditors, there is one important difference. In case of financial difficulty in a corporation the stockholders have no liability further than their stock contributions. Should a corporation go bankrupt, the creditors must be paid in full before the stockholders get anything and if in liquidation there is not enough to pay the liabilities in full, the receiver would pro-rate what he had to the creditors. The stockholders, of course, would get nothing, but they would not be called upon for any further contribution. Their liability is limited to the amount of their capital stock. This is simply a legal difference between the two forms of business organization.

BUSINESS TRANSACTIONS AND THE BALANCE SHEET

At this point a series of transactions involving the elements of the balance sheet are presented, together with balance sheets illustrating the situations set forth in the transactions.

Transaction No. 1. — Mr. X has $10,000.00 cash with which he intends to start business. (At this time a balance sheet would hardly be required, nor would balance sheets be required for each succeeding transaction. They are shown here simply to illustrate some of the truths regarding the operation of the fundamental equation.)

MR. X

BALANCE SHEET

Assets		*Liabilities*	
Cash	$10,000.00		none
		Net Worth	
		Mr. X	$10,000.00
Total Assets	$10,000.00	*Total Liab. & N. W.*	$10,000.00

The result of this transaction is an increase in the asset cash offset by an equal increase in net worth.

Transaction No. 2. — Continuing the narrative, suppose Mr. X spends $3000.00 of this cash for furniture and equipment. A balance sheet at this point would be:

Assets		*Liabilities*	
Cash	$ 7,000.00		none
Furniture & Equipment	3,000.00	*Net Worth*	
		Mr. X	$10,000.00
Total Assets	$10,000.00	*Total Liab. & N. W.*	$10,000.00

It will be noted from a study of this balance sheet that there has been merely an exchange of assets of equal value with no resulting changes in net worth.

Transaction No. 3. — Let us now assume that Mr. X has received $2000.00 worth of merchandise which he purchased on credit from the New York Wholesale Company, with which to stock his shelves. The transaction would result in the following balance sheet:

Assets		*Liabilities*	
Cash	$ 7,000.00	New York Wholesale Co.	$ 2,000.00
Furniture & Equipment	3,000.00		
Merchandise	2,000.00	*Net Worth*	
		Mr. X	10,000.00
Total Assets	$12,000.00	*Total Liab. & N. W.*	$12,000.00

The student will observe that, although the total assets have increased from $10,000.00 to $12,000.00, at the same time there has been established a liability equal in amount, which has prevented the net worth from moving either upward or downward. Mr. X's proprietorship or business position thus far has not changed, notwithstanding the fact that his assets have changed in form and have grown in amount. This is easily understood if in each case the student will apply the fundamental equation

$$\textit{Assets} = \textit{Liabilities} + \textit{Net Worth}.$$

Transaction No. 4. — To carry on Mr. X's business a little further, suppose he sells for $500.00 cash some of the merchandise which cost him $300.00. The effect of this transaction is illustrated in the following balance sheet:

Assets		*Liabilities*	
Cash (7,000 + 500)	$ 7,500.00	New York Wholesale Co.	$ 2,000.00
Furniture & Equipment	3,000.00		
Merchandise (2,000 − 300)	1,700.00	*Net Worth*	
		Mr. X	
		(10,000 + 200 profit)	10,200.00
Total Assets	$12,200.00	*Total Liab. & N. W.*	$12,200.00

From the balance sheet above the student should note that profits resulting in increased assets belong to the proprietor. Such increases must, therefore, be added to his capital. This is true because the fundamental equation must always hold — A — L = NW. In the balance sheet above the assets have grown from $12,000.00 to $12,200.00, but the liabilities have remained the same. Consequently, net worth, the only other factor, had to be increased.

Transaction No. 5. — Now suppose that Mr. X, wishing to expand his business, borrows $3000.00 from the bank on his personal note. This transaction will change the balance as shown below.

Assets		*Liabilities*	
Cash	$10,500.00	New York Wholesale Co.	$ 2,000.00
Furniture & Equipment	3,000.00	Notes Payable	3,000.00
Merchandise	1,700.00	*Total Liabilities*	$ 5,000.00
		Net Worth	
		Mr. X	10,200.00
Total Assets	$15,200.00	*Total Liab. & N. W.*	$15,200.00

This transaction increased total assets by $3000.00 cash and at the same time increased liabilities in the form of notes payable by the same amount. Therefore, net worth remained unchanged.

Transaction No. 6. — Let us suppose that the New York Wholesale Company accepts a sixty-day note in payment of its account. This will change the balance sheet as follows:

Assets		*Liabilities*	
Cash	$10,500.00	Notes Payable	$ 5,000.00
Furniture & Equipment	3,000.00		
Merchandise	1,700.00	*Net Worth*	
		Mr. X	10,200.00
Total Assets	$15,200.00	*Total Liab. & N. W.*	$15,200.00

This transaction illustrates the decrease of one liability by the increase of another liability.

From a study of the foregoing transactions illustrating changes in the elements of a balance sheet, the following truths may be deduced:

An increase in an asset may be offset by:
1. An Increase in Net Worth (See Transactions No. 1 and No. 4)
2. An Increase in a Liability (See Transaction No. 5)
3. A Decrease in another Asset (See Transaction No. 2)

An increase in a liability may be offset by:
1. An Increase in an Asset (See Transactions No. 3 and 5)
2. A Decrease in another Liability (See Transaction No. 6)

An increase in net worth may be offset by:
1. An Increase in an Asset (See Transactions No. 1 and 4)

Other transactions involving the elements of the balance sheet might be mentioned, but in every instance the resulting equation will be, *total assets equal to total liabilities plus net worth.*

At this point let us assume that Mr. X has been in business for a year and the following balance sheet presents his financial position:

MR. X

Balance Sheet, as of June 30, 19—

Assets		*Liabilities & Net Worth*	
Cash	$ 1,876.50	*Liabilities:*	
Merchandise Stock	3,450.00	Mortgage Payable	$15,000.00
Accounts Receivable	16,380.50	Notes Payable	4,500.00
Land & Buildings	20,000.00	Accounts Payable	13,896.60
Office Equipment	1,400.00		
Delivery Truck	3,000.00	*Net Worth:*	
Notes Receivable	2,800.00	Mr. X — Capital a/c	15,510.40
Total Assets	$48,907.00	*Total Liab. & N. W.*	$48,907.00

Illustration No. 4

In summarizing let us note:

(1) That the balance sheet presents Mr. X's financial position at a given moment of time — as of June 30, 19—.

(2) All of the items on the asset side represent *things of value* in Mr. X's possession.

(3) The items on the right-hand side represent *ownership claims* against the assets of the business as a whole.

If these claims are held by outsiders, they constitute the liabilities of the business, while the owner's equity or net worth is measured by the difference between assets and liabilities.

It will be noted in the illustration above that there is listed among the assets an item *Land and Buildings,* valued at \$20,000.00. This asset is in the possession of, and is being used by, the business, and the title is probably in Mr. X's name. But note the fact that on the liability side there is the account *Mortgage Payable* in amount of \$15,000.00. This means that although Mr. X owns the land and buildings, and has control over them, he has mortgaged them to three-fourths of their book-value and has by that act created an obligation of \$15,000.00 in favor of the mortgagee (the person who loaned him the money).

(4) The third characteristic is a corollary of the second, and is that the totals of the balance sheet are always equal. This follows logically from the very nature of the fundamental accounting equation, and is, as we shall see later on, the cornerstone of double entry bookkeeping and accounting.

The balance sheet above, although a very elementary form, has given us the fundamental elements; and, regardless of the size of the business or its particular form of organization, whether sole proprietary, partnership, or corporate, these fundamental truths would not change.

REPORT FORM OF BALANCE SHEET

The form of balance sheet so far illustrated is generally known as the balance or account form, because it is drawn somewhat in the form of a scale or balance which is also similar in form to an account. There is no real reason except custom that the assets should appear on the left side and the liabilities and net worth on the right side. As a matter of fact, in England the balance sheet is prepared in exact reverse order.

Another form of balance sheet, often used when space for display is limited, is known as the report form of balance sheet.

This form displays first the assets, then the liabilities, followed by the net worth section.

REPORT FORM OF BALANCE SHEET ILLUSTRATED

The following balance sheet in report form contains the same information as the balance sheet of Mr. Thomas (Illustration No. 1), shown on page 8 in balance form.

JOHN H. THOMAS

Balance Sheet, as of December 31, 19—

ASSETS		
Cash	$ 2,000.00	
Merchandise Inventory	11,500.00	
Accounts Receivable	14,000.00	
Land	2,000.00	
Buildings	18,000.00	
Office Equipment	1,500.00	
Delivery Equipment	1,000.00	
Total Assets		$50,000.00
LIABILITIES		
Notes Payable	$ 1,000.00	
Accounts Payable	12,000.00	
Mortgage Payable	10,000.00	
Total Liabilities		$23,000.00
NET WORTH		
John H. Thomas		$27,000.00
Total Liabilities & Net Worth		$50,000.00

This form is quite frequently used in newspaper display and in typing where a wide carriage machine is not available. For our work in the text and the classroom, the balance form is to be preferred because it portrays much better the fundamental idea of equilibrium which is always present in a balance sheet.

CLASSIFIED BALANCE SHEETS

The beginning student will do well to master the simple balance sheets so far presented, however, because statements taken from actual business are often encountered by the beginning student; and since these practical statements are frequently in

classified form, the balance sheet on page 20 is presented and very briefly explained. A more detailed study of the proper classification of accounts must of course be deferred until the student has a stronger foundation upon which to build.

In further explanation of this balance sheet it might be well at this time to study the several subdivisions, one group at a time.

CURRENT ASSETS

Included in this group are cash and any other asset which in the usual course of business will be converted into cash in a short period of time. Other terms that are sometimes used to describe assets in this group are *quick assets* and *liquid assets.*

FIXED ASSETS

The second classification, *Fixed Assets,* often called *Capital Assets,* includes property of a more permanent nature owned by the business. Assets in this grouping are not held for realization into cash, as are current assets. Office furniture and equipment on the books of a commercial organization would be part of its permanent equipment and a fixed asset. If the company were in the office furniture and supply business, then such an account would be an *Inventory* account, held with the purpose of sale and conversion into cash, and therefore a current asset. The purpose for which an asset is held, therefore, has a bearing on how the particular asset shall be classed.

DEFERRED CHARGES

Another subdivision of the balance sheet is one headed *Deferred Charges* or *Prepaid Expense Items.* Included here are expense items which have been purchased during the current period, but which have an unconsumed value that will be used in a subsequent period.

OTHER ASSETS

This caption is frequently used to list a few assets not readily classed in the other groups. Intangible assets, such as those listed in our illustration, will often make up the bulk of this

Van Sickle Oil Co., Inc., Balance Sheet, as of Dec. 31, 19—

Assets			
Current Assets:			
Cash in Banks		$ 13,280.00	
Petty Cash Fund		250.00	
Accounts Receivable	$65,820.00		
Notes Receivable	9,000.00		
	$74,820.00		
Less Reserve for Doubtful Accounts	8,269.20		
		66,550.80	
Inventory		30,200.00	
Total Current Assets			$110,280.80
Fixed Assets:			
Land		$ 8,000.00	
Buildings	$40,000.00		
Less Reserve for Depreciation	4,400.00		
		35,600.00	
Machinery and Equipment	$28,200.00		
Less Reserve for Depreciation	2,470.00		
		25,730.00	
Delivery Equipment	$30,000.00		
Less Reserve for Depreciation	15,000.00		
		15,000.00	
Total Fixed Assets			84,330.00
Deferred Charges:			
Advertising Prepaid		$ 1,200.00	
Insurance Prepaid		800.00	
Fuel Inventory		1,600.00	
Total Deferred Charges			3,600.00
Other Assets:			
Patent Rights		$ 5,000.00	
Good-will		20,000.00	
			25,000.00
Total Assets			$223,210.80
Liabilities			
Current Liabilities:			
Wages Accrued		$ 600.00	
Taxes Payable		240.00	
Acceptances Payable		2,400.00	
Notes Payable (Bank)		6,000.00	
Accounts Payable		42,500.76	
Total Current Liabilities			$ 51,740.76
Fixed Liabilities:			
Mortgage Payable		$ 18,000.00	
Chattel Mortgage (Auto Truck)		1,200.00	
Notes Payable (Building and Loan)		6,420.00	
Total Fixed Liabilities			25,620.00
Total Liabilities			$ 77,360.76
Net Worth			
Capital Stock Authorized (Par $100.00)		$500,000.00	
Less Unissued Stock		390,000.00	
Issued and Outstanding			110,000.00
Surplus			35,850.04
			$223,210.80

RESERVES

Briefly, *Reserves* are valuation accounts, and are placed on the books so that the assets may be exhibited at their true value. A more complete treatment of reserves and similar accounts must be deferred to a subsequent chapter.

CURRENT LIABILITIES

Here are listed those accounts which must be paid in a relatively short period of time. The length of the period which is used to separate current from fixed liabilities must depend upon individual businesses. It may be ninety days, six months, or a year. An important rule to remember, however, is to use the same period to mark off current liabilities as is used on the other side to classify current assets. This is important because a comparison of these two groups, current assets and current liabilities, will indicate the working capital of a business. Therefore, unless the same period is used on both sides, any result would be unreliable. Applying this rule, short-term notes payable are current liabilities, while long-term notes payable must be classed as fixed liabilities. In our illustration above notes payable (building and loan) are classed as fixed liabilities, because no doubt they represent long-term notes. All installments becoming due currently, of course, should be listed with current liabilities.

FIXED LIABILITIES

Here are grouped those liabilities which mature in a period beyond that reserved to limit current liabilities.

NET WORTH

The illustration above is that of a corporation and the net worth is made up of three accounts. *Authorized Capital Stock* in amount of $500,000 simply means the company's charter permitted it to issue stock to that amount. The second account, *Unissued Stock*, represents the amount of stock still unissued and which must be deducted from the authorized capital stock in order to determine the amount of stock which is issued and outstanding. The *Surplus* account measures the excess of as-

sets over and above capital stock outstanding plus total liabilities. Should the assets be less than such a total, then instead of a *Surplus,* there would be a *Deficit.*

QUESTIONS ON THE CHAPTER

1. Give two reasons for preparing a balance sheet.
2. Is it important to date a balance sheet? Why?
3. Define balance sheet.
4. Define assets, liability, net worth.
5. What other terms are frequently used in place of net worth?
6. What is the fundamental equation?
7. Why are the claims of outsiders listed apart from those of the proprietor?
8. If assets are increased, what other changes may take place on the balance sheet?
9. What factors may cause the proprietor's net worth to increase or decrease?
10. Give an example of
    (*a*) Increase in liability and increase in assets;
    (*b*) Increase in assets with increase in net worth.
11. If liabilities are increased, what other changes are likely on the balance sheet?
12. If the proprietor of a business borrows money from his bank on his personal note, but for the use of the business, is the proprietor's net worth increased or not? Give reasons.
13. Distinguish clearly between proprietor's and creditors' equities in the assets of a business.
14. Explain and illustrate the difference between the net worth section of a balance sheet for a sole proprietor, for a partnership, and for a corporation.
15. (*a*) What do you understand by limited liability of stockholders? (*b*) Unlimited liability of a sole proprietor for debts of his business? (*c*) What is the liability of partners for debts in a partnership business?
16. What may be meant by the phrase " I own a million dollar business "?
17. How are assets and liabilities usually classified? Why?
18. Explain under what circumstances an expense item might be properly classified as an asset.
19. What do you understand as working capital?
20. Explain the net worth section
    (*a*) for a sole proprietor
    (*b*) for a partnership
    (*c*) for a corporation

PROBLEM MATERIAL

Problem 1

Mr. Daniel Morgan rented a vacant store at 90 Main Street in which he planned to conduct an Automobile Tire, Oil and Gasoline sales and service business. At September 1, 1939 he was ready to start business and asks you to prepare his opening balance sheet. He advises you that he has the following: Gasoline Pumps and other equipment which cost him new $900.00; he owes the Owens Pump Co. $500.00; he has purchased tires and tubes and other miscellaneous supplies in total $2400.00; he owes the Star Tire Co. $840.00; his shelving and other store equipment cost him $600.00; he owes the Store Equipment Co. $300.00; he also owes the Standard Gas Co. for 8000 gallons of gasoline at $.12 per gallon and $300.00 for oil which has been delivered to him but not paid for. He has a cash balance of $2240.00.

Required: A balance sheet for Mr. Morgan.

Problem 2

Mr. Daniel Morgan has completed one year in business and requests you to prepare his balance sheet as of September 1, 1940. From a study of his records you determine that two new gasoline pumps have been installed and other equipment purchased so that there are now pumps and equipment valued at $2000.00. The present stock of Tires and Tubes is $2800.00; the store equipment is now valued at $900.00. Mr. Morgan owes to sundry creditors accounts totalling $2940.00. His inventory of Gasoline is 12,000 gallons at $.12 per gallon and Oil costing him $420.00 is also on hand. Mr. Morgan during the year negotiated a loan from the bank which has a present balance due of $1800.00. He purchased a delivery and service truck for $900.00 on which there is unpaid $500.00 in finance notes. The cash on hand and in the bank is $1440.00.

Required: A balance sheet for Mr. Morgan.

Problem 3

Mr. D. Fraser, a partner of the firm of Fraser and Thompson, has engaged you to prepare a balance sheet for the partnership as of October 1, 1940. An examination of the company's books reveals the following accounts:

Mr. D. Fraser Capital Account $9450.00; Mr. A. Thompson Capital Account $8545.00; Cash on hand and in the bank $3417.40; Notes Receivable $1600.00; Notes Payable $2400.00; Accounts Receivable $6218.20; Accounts Payable $5840.60; Inventory $3600.00;

Land and Buildings \$15,000.00; Mortgage Payable \$10,000.00; Machinery and Equipment \$6000.00; Office Equipment \$400.00.

Required: A balance sheet for the firm of Fraser and Thompson, as of October 1, 1940.

Problem 4

Mr. J. B. Franklyn, president of the Franklyn Sales Inc., asks you to prepare the corporation's annual balance sheet. An examination of the general ledger indicates that the books have been closed and the accounts balanced. You abstract the following accounts and their balances at December 31, 19—.

Accounts Receivable \$14,728.00; Reserve for Doubtful Accounts \$294.56; Store Equipment \$12,480.00; Reserve for Depreciation of Store Equipment \$1872.00; Notes Receivable \$4800.00; Accounts Payable \$42,318.00; Cash \$6280.74; Notes Payable \$6000.00; Inventory of Merchandise \$36,821.32; Delivery Equipment \$6000.00; Fuel Inventory \$320.00; Prepaid Insurance \$240.00; Common Capital Stock \$25,000.00; Surplus \$6345.50; Office Equipment \$1600.00; Reserve for Depreciation of Office Equipment \$240.00. Reserve for Depreciation of Delivery Equipment \$1200.00.

Required: A balance sheet in report form, similar to the illustration on page 20 of your text.

Problem 5

Mr. F. Brown who conducts a hardware business requests you to prepare a classified balance sheet in report form as of December 31, 1940, using proper account titles from the description material listed below. There was \$3642.18 Cash in the bank, and a Petty Cash fund of \$100.00 on hand. There were notes receivable from customers in total of \$2200.00 and accounts with customers in amount of \$6824.12. However, against these notes and accounts there was a reserve for doubtful accounts in amount of \$180.48. There were short-term notes given to trade creditors in total \$3000.00, and accounts payable of \$16,200.42. The Company owned land valued at \$2000.00, upon which it had constructed a building which cost \$16,000.00, and against which a reserve for depreciation of \$3200.00 had been accumulated. Machinery and other permanent equipment had been installed at a cost of \$7200.00, against which a reserve of \$1440.00 had been accumulated. There was, however, a Mortgage on the Land and Buildings in amount of \$8000.00 and Chattel Notes Payable in two years of \$2400.00 against the machinery. The Company also owned Office Equipment which cost \$900.00 and against which it had a reserve of \$180.00. There was on hand listed at cost price merchandise stock worth \$14,754.00 (the current market price was considerably higher). The Company also had an advertising contract on which there was a prepaid value of \$1200.00, and simi-

larly there were prepaid Insurance premiums valued at $240.00. Mr. Brown's capital account had a credit balance of $20,459.40.

Required: A classified balance sheet in report form similar to the illustration on page 20 of your text.

PROBLEM 6

Mr. K. Brewer applies for a loan at the bank on Jan. 15, 1940. The banker asks him for a copy of his last balance sheet, prepared when the books were closed Dec. 31, 1939. In checking the books and records Mr. Brewer finds he had lost his only copy of the balance sheet and asks you to prepare a new one for him as of the end of 1939. You discover that the merchandise Inventory Account sheet is missing from the ledger binder. However, you gather the remaining information as to account balances at the end of 1939 as follows: Cash $1042.20, Accounts Payable $1826.30, Notes Receivable $500.00, Mortgage Payable $4000.00, Accounts Receivable $1224.00, Notes Payable $300.00, Land and Buildings $8000.00, Mr. K. Brewer Capital $6710.50.

Required: From the facts above determine the amount of the merchandise inventory and prepare a balance sheet as of December 31, 1939.

CHAPTER III

THE PROFIT AND LOSS STATEMENT

PURPOSE

Another important statement prepared by the accountant is the Profit and Loss Statement. This statement reviews the operations of the business over a limited period of time and sets down in a systematic arrangement the several items of income and expense leading to the net change in capital or proprietorship — a profit or a loss for the period under review.

Men engage in business with the hope and intention of making a profit. Although not all of them succeed, as even a perfunctory study of bankruptcies will show, enough of them do enjoy gains to encourage others to take chances. Men will make a profit and succeed, in a business way, if they can manage to sell their goods or render their services for an income which is greater than the total cost of procuring and selling such goods or services. On the other hand, should their costs or expenses exceed their total income, obviously the net result will be a loss rather than a profit; and, unless this loss is temporary and can be borne until the tide changes, the operators of such businesses must fail.

A study of these two fundamental factors, income and expenses, should therefore be given considerable attention not only by the student, but also by the business man. The business man who can control these two factors in such a manner that income will always exceed expense will be assured of success. In fact, all that a merchant has to do is to " take in " from sales and other sources of income more than he has to " lay out " for the various expenses of doing business. A very simple formula it would seem, and fundamentally there is no doubt of its truth. The real difficulty, of course, is to put the formula to work.

The banker in passing on a loan will rely to a large extent upon the balance sheet, because that statement exhibits the applicant's present financial position. This information, while vitally important, must be further supplemented by another

statement which will show the banker, or other interested person, how the company arrived at its present position. The banker may compare several balance sheets and thus learn the trend of a business and its probable outlook for the future, but a much better study can be made from several profit and loss statements.

PROFIT AND LOSS STATEMENT AND BALANCE SHEET DIFFERENTIATED

The Balance Sheet exhibits the financial position of a company on a definite date, whereas the profit and loss statement reviews the activities of a business over a period of time, and shows the changes which have taken place between two dates. This difference is recognized in the headings of the two statements.

The heading of the balance sheet shows the definite date on which the balance sheet was prepared, as:

JOHN H. THOMAS

Balance Sheet, as of December 31, 1940

The heading of the profit and loss statement, on the other hand, will state the period covered by the statement, as:

JOHN H. THOMAS

Profit and Loss Statement
for the six months' period ended December 31, 1940

or

JOHN H. THOMAS

Statement of Income, Profit and Loss
for the period July 1 to December 31, 1940

PROFIT AND LOSS STATEMENT EXPLAINED

The profit and loss statement on page 29, while quite elementary, has nevertheless enough material for our study at this time.

The statement in a general way presents in narrative form the principal source of income — first the gross income, then the net income, should there be any return sales or allowances. From the net sales income is deducted the *Cost of Goods Sold,*

giving a *Gross Profit on Sales.* From this figure is deducted first the *Sales Expenses* and then the *General and Administrative Expenses,* which leaves a *Net Income* from operations. To this figure there is usually added any non-operating income which may have been earned during the period, less any non-operating expense. The net result is the profit transferable to net worth. Probably the best way for a beginner to understand the statement is to analyze the terminology and accounts used, section by section, in the following illustration.

NET SALES SECTION

The principal source of income in a commercial business will be recorded in an account entitled *Sales.* On the books of a professional man this account might be called *Income from Fees.*

There are, of course, other sources of income such as income derived from investments, or dividends from stock, or interest from bonds or mortgages. Income may result from the sale of real estate or other property, or from royalties or rentals.

On the books of a business organization, however, the *Sales* account usually measures the principal source of income; most of the other sources enumerated above would go under the caption of non-operating income, and will be treated further under that caption. In our illustration Mr. Thomas sold during the six months' period goods to the extent of $62,000.00.

The account does not disclose whether the merchandise was sold for cash or on account. It simply lists the total contract price of all goods sold during the period.

In many businesses accounts entitled *Sales Returns, Sales Allowances,* or *Sales Returns and Allowances* will be found. These accounts are necessary to record the sales price of goods returned or allowances made for one reason or another, the sum total of which must be deducted from the Sales account in order to determine the net income from sales. On our illustrative statement these returns and allowances amounted to $1800.00.

THE PROFIT AND LOSS STATEMENT ILLUSTRATED

The following statement is presented as a basis of study.

JOHN H. THOMAS

Profit and Loss Statement
for the six months' period ended Dec. 31, 19—

Gross Income from Sales			$62,000.00
Less Returns and Allowances			1,800.00
Net Sales			$60,200.00
Deduct the Cost of Goods Sold:			
Inventory on hand June 30		$12,500.00	
Add Purchases	$50,800.00		
Less Returns and Allowances	2,100.00		
		48,700.00	
Total Available for Sale		$61,200.00	
Less Inventory on hand Dec. 31		16,000.00	
Cost of Goods Sold			$45,200.00
Gross Profit			$15,000.00
Deduct Expenses of Operation:			
Selling Expenses:			
Salesman's Salary	$ 1,500.00		
Delivery Salary and Expense	1,600.00		
Advertising	800.00		
		$ 3,900.00	
General and Administrative Expenses:			
Office Salaries	$ 6,000.00		
Rent	500.00		
Telephone and Telegraph	60.00		
Insurance	200.00		
		$ 6,760.00	
			10,660.00
Net Profit from Operations			$ 4,340.00
Add Non-Operating Income:			
Interest income	72.00		
Purchase Discounts	208.00		
		$ 280.00	
Less Non-Operating Expense:			
Interest expense	60.00		
Sales Discounts	122.00		
		$ 182.00	
			98.00
Net Profit for the Period			$ 4,438.00

THE COST OF GOODS SOLD SECTION

Cost of Goods Sold is a caption used on a profit and loss statement and may or may not be a summary account on the books. It is, however, made up of three very important ac-

counts. The amount in the *Inventory* account at the beginning of the accounting period, to which is added the total amount of *Purchases* of merchandise made during the period. The total derived from adding these two factors represents the total amount of merchandise available for sale during the period. In our illustration the amount is $61,200.00. As a stock of merchandise must always be kept available for sale, an inventory must be computed at the end of the period, and this amount is deducted to determine the cost price of goods sold. This section will of course be expanded, as in our illustration, if there should be any *Purchase Returns* or *Allowances*. A subtraction of the cost of goods sold from the net income from sales will give the gross profit on sales. In our example the cost of goods sold is labeled $45,200.00 and, when this is subtracted from the net income from sales $60,200.00, a gross profit of $15,000.00 is obtained.

OPERATING EXPENSES

From the gross profit figure, the various expenses of operation must be deducted before the net profit from operations may be obtained. For managerial purposes these expenses are quite frequently separated into *Selling Expenses* and *General and Administrative Expenses*.

SELLING EXPENSES

Included under this heading should be all accounts which measure those expenditures made directly to secure the sales income. Accounts such as those listed in our illustrative Profit and Loss Statement are the usual clear-cut selling expenses. In addition there will be found frequently such accounts as *Salesmen's Commissions, Freight and Cartage Outward, Wrapping Materials, Shipping Cases, Depreciation of Delivery Equipment*, and *Delivery Truck Maintenance*.

GENERAL AND ADMINISTRATIVE EXPENSES

Under this caption, in addition to the accounts in our illustrative statement, will often be found such accounts as *Taxes, Light Heat and Power, Depreciation of Office Equipment*, and *Depreciation of Buildings*.

NON-OPERATING INCOME

This heading is reserved for accounts which arise from income derived from operations other than the principal and regular operations of the business.

Another heading quite frequently used in place of *Non-Operating Income* is simply *Other Income.* Beside the two accounts illustrated under this heading, we may find accounts such as *Rental Income* or *Dividends Received.* The former account is reserved for income received from rentals, while dividends received from invested funds should be placed in the latter.

NON-OPERATING EXPENSE

This caption is frequently employed to head those expense accounts which have no bearing on the usual operations of the business. Here also another heading, *Other Expenses,* is frequently used instead of *Non-Operating Expenses.* In addition to the two accounts listed on our illustration, expense or loss accounts arising from extraneous operations may also be listed here, as for example: *Loss on Sale of Stock, Loss on Sale of Real Estate,* or losses on sale of any capital assets.

NET PROFIT SECTION

The net profit is the final result of the statement and belongs to the owners of the business. In a sole proprietary business the amount is placed to the credit of the proprietor in his capital account, while if a partnership, the net profit must be divided in accordance with the partnership agreement. On the books of a corporation the net profit belongs to the stockholders and is transferred to the surplus account.

ASSET AND EXPENSE DIFFERENTIATED

In our chapter on the balance sheet, an asset was briefly defined as "anything of value owned by the business." We had as illustration such accounts as cash, land, buildings, machinery, and equipment — all good tangible assets, in addition to the so-called intangibles, such as accounts receivable, patent rights, and even good-will. Under the caption *Deferred Assets* we found listed *Prepaid Advertising, Prepaid Insurance, Fuel Inventory, Stationery and Supplies.* On some of the profit and

loss statements presented, the student may have noted expense accounts with titles very similar to asset account titles, for example: *Advertising, Insurance, Fuel, Stationery and Supplies.*

Accounts of this character are known as mixed accounts, because they contain in part the elements of an asset, and at the same time the qualities of an expense. Let us take, for example, the *Fuel* account; this account, which represents the amount expended for coal, oil, or other fuel, is usually thought of as an expense account.

Often, because of favorable prices, a company will purchase a supply of fuel large enough to carry it through its entire season. The fuel, coal or oil, has of course all the elements of an asset; "something of value owned by the business"; nevertheless, because it was purchased to be consumed in operation of the business, it will be charged into the *Fuel* account and classed as an expense. At the close of an accounting period, however, when financial statements are being prepared and inventories taken as a matter of routine, should there be any fuel on hand, this will be measured and valued at cost. This inventory will be separated from the expense account *Fuel* to which it was first charged at time of purchase, and when so separated will be placed on the books as *Fuel Inventory,* an asset under the caption *Deferred Charges.* Similarly, should an expenditure be made for advertising, and the advertising benefit more than the current accounting period, then the unexpired value should be determined and this *Unexpired Advertising* should be separated from the expense account *Advertising* and placed on the balance sheet as a *Deferred Charge.*

The mechanics of separating these so-called mixed accounts into their elements, asset and expense, is done at the end of an accounting period by means of adjustment entries and will be treated thoroughly in a subsequent chapter.

At this time, however, we might say that all assets are similar to expenses in that they are all consumed in the operation of the business, the only difference being the length of time it takes to consume the different items. Fuel, under ordinary conditions, will be consumed almost immediately, so will stationery and supplies; whereas a building may last fifty to seventy-five years before it will be wholly consumed in the operation of the business. An auto truck, used for delivery, in

normal use will wear out, or be consumed, in a much shorter time, probably three years, while a salesman's automobile may not last more than a year before it must be traded for a new car. The relative life of an item, then, is one factor used by accountants in deciding whether to fix an expenditure as an asset or an expense. The beginning student, however, should have little trouble in distinguishing between ordinary routine expense and asset accounts. The few mixed accounts, such as those just mentioned, are adjusted at the end of the accounting period, and the work is usually done by a bookkeeper or an accountant of experience.

STATEMENT OF CAPITAL

Another statement quite frequently required in practice is the *Statement of Capital.* A study of two balance sheets, one drawn at the beginning of an accounting period, and one at the end, will yield the net increase or decrease in the proprietor's capital account; but what caused the increase or decrease may not be apparent because there are several factors which might cause an increase or decrease in net worth. The net profit as determined by the profit and loss statement will, of course, increase the owner's net worth. However, the increase or decrease resulting from a comparison of two balance sheets may not be equal to the net profit because the proprietor may have

MR. X

Statement of Capital

Capital January 2, 1940		$10,000.00
Add additional investments:		
February 5, 1940	$1,000.00	
May 10, 1940	2,000.00	
		3,000.00
		$13,000.00
Less Withdrawals:		
June 1, 1940		500.00
		$12,500.00
Add Profit for year ended December 31, 1940 as per Profit and Loss Statement		3,010.40
Capital January 2, 1941		$15,510.40

made an additional investment, which would of course be an addition to his capital account; and, on the other hand, he might have reduced his capital account by a withdrawal of funds.

Where there have been changes in the proprietor's capital account during the period, a statement of capital such as that on p. 33 may be required.

This statement is required only when there have been interim changes in the proprietor's capital account. However, if his investment remains unchanged throughout the accounting period, because there were no additional investments or withdrawals, the statement of capital would not be required. In such a case the profit resulting from the operations of the period need only be added to the net worth at the beginning of the period so as to determine or check the net worth at the close of the period — as determined from the application of our fundamental rule.

For example, let us assume that Mr. X has continued his business until December of 1940 and has made no additional investments or withdrawals of capital funds. Then, on a balance sheet drawn December 31, 1940, all that would be required is exhibited below under the Net Worth section:

NET WORTH

Mr. X. Capital, January 2, 1941	$15,510.40
Add Profit as per Profit and Loss Statement	4,200.50
Net Worth, December 31, 1940	$19,710.90

This illustration would be part of the balance sheet drawn December 31, 1940. The increase in net worth is due entirely to a profit on the year's operations.

The capital statement illustrated would also serve well for a partnership, except, of course, that one statement would be required for each partner. In partnerships, drawings are often limited, and sometimes additional investments may require mutual consent of the partners; this subject will, however, be treated fully in a subsequent chapter.

STATEMENT OF SURPLUS

On the books of a corporation, instead of a *Statement of Capital,* we find the *Statement of Surplus.* This statement is

used to record the interim changes in surplus which may have been made during the period. Often this will be a complicated statement, because in a large corporation many transactions may be made during the accounting period which go directly to the surplus account. This statement, therefore, may be a very important one to the directors and stockholders of a corporation. The following example is a simple one intended only to show a few of the common changes in surplus which often occur in practice.

THE EXCELSIOR CO., INC.

Statement of Surplus
Year Ended December 31, 1940

Balance, December 31, 1939, per books		$25,000.00
Add: Profit on Sale of X Co. stock (an extraneous profit)		600.00
Profit for year as per profit and loss statement		13,200.00
		$38,800.00
Less: Dividends Declared Jan. 15, 1940		
Preferred: 7% on $50,000 —	$ 3,500.00	
Common: 10% on $100,000 —	10,000.00	
		$13,500.00
Balance, December 31, 1940		$25,300.00

THE MANUFACTURING COMPANY PROFIT AND LOSS STATEMENT AND USE OF SCHEDULES ON STATEMENTS

The profit and loss statement previously illustrated is a form which would serve almost any commercial organization except a manufacturing company. A profit and loss statement prepared for a manufacturing company would be very similar except in one section. The *Cost of Goods Sold* section for any organization but a manufacturing company is briefly made up as follows:

COST OF GOODS SOLD

Beginning Inventory		$10,000.00
Add Purchases	$56,000.00	
Less Returns	2,000.00	
Net Purchases	$54,000.00	
Add inward freight	1,000.00	
		$55,000.00
		$65,000.00
Less Inventory (new)		12,000.00
Cost of Goods Sold		$53,000.00

For a manufacturing concern, however, because it manufactures, rather than purchases the goods it sells, this section would be made up, in brief, as follows:

COST OF GOODS SOLD

Inventory — Finished Goods (old)	$ 10,000.00
Add: Cost of Goods Manufactured, *Schedule "A"*	150,000.00
	$160,000.00
Deduct Inventory Finished Goods (new)	15,000.00
Cost of Goods Sold	$145,000.00

USE OF SCHEDULES ON STATEMENTS

On the foregoing *Cost of Goods Sold* section for a manufacturer, note that the *Cost of Goods Manufactured* calls for a schedule.

The following is a typical schedule:

SCHEDULE "A"

Cost of Goods Manufactured

Inventory Work in Process, Jan. 1, 19—		$ 15,000.00
Add: Cost of Raw Materials Used:		
Inventory Raw Materials Jan. 1	$ 8,500.00	
Add, Purchases of Raw Materials	70,000.00	
Freight Inward	1,500.00	
	$80,000.00	
Less Inventory Raw Materials Dec. 31	10,000.00	
Cost of Raw Materials Used		$ 70,000.00

Add: Direct Labor		$ 45,000.00
Manufacturing Expenses:		
Indirect Labor	$16,000.00	
Factory Supplies Used	3,000.00	
Light, Heat, & Power	2,400.00	
Depreciation of Machinery	4,600.00	
Factory Taxes	1,000.00	
Factory Insurance	2,000.00	
Total Manufacturing Expenses		$ 29,000.00
Total		$159,000.00
Less Work in Process Dec. 31, 19—		9,000.00
Cost of Goods Manufactured		$150,000.00

In the preparation of the balance sheet and the profit and loss statement, quite frequently by the use of Schedules it will be possible to exhibit, in a condensed form, a complete financial statement on one page. Schedules should be used when more than five accounts appear under any section, particularly if detailed listing would crowd the principal report. For example, the profit and loss statement might have schedules for *Selling Expenses* and for *General and Administrative Expenses*. On the balance sheet, individual accounts receivable, or payable, never appear, but for managerial purposes schedules of the individual accounts are made up to support the main statement. Similarly, there might be a schedule prepared for *Investments* or *Fixed Assets* or any other group of similar accounts where the number will warrant their use.

QUESTIONS ON THE CHAPTER

1. What is the purpose of a profit and loss statement?
2. What do you understand by (*a*) Expense? (*b*) Income?
3. Write a paragraph explaining mixed accounts.
4. (*a*) Is it possible to determine the profit or loss made by a business from a balance sheet prepared at the end of an accounting period?

   (*b*) Would having the balance sheet for the last period help? Explain.

   (*c*) What effect would withdrawals of capital or additional investments have on the profit or loss?
5. Draw a skeleton form profit and loss statement for a mercantile company.

   Explain why each section is prepared.

6. Explain the use of a statement of capital for a sole proprietor.

7. Explain and illustrate with your own accounts and figures a typical "Surplus Statement."

8. (*a*) What is Non-Operating Income?
   (*b*) Name three Non-Operating Income accounts.

9. (*a*) What is Non-Operating Expense?
   (*b*) Name three Non-Operation Expenses.

10. If you were a banker and were studying the advisability of granting a loan, which statement would you prefer — the balance sheet or the profit and loss statement? Why?

11. What is the difference in the headings of the balance sheet and those of the profit and loss statement? Is the difference important? Why?

12. What is a *Schedule?* Name three, and place five accounts under each.

13. Must the final net profit as determined from the profit and loss statement agree with the difference in proprietorship as ascertained from a comparison of balance sheets drawn at the opening and close of the accounting period? Why or why not?

14. Why is depreciation an expense?

15. Explain how *Interest* may be either an expense or income. What is the determining factor?

PROBLEM MATERIAL

Problem 1

From the following selected accounts taken from the books of John Davidson, at October 31, 1940, prepare a profit and loss statement: Total Sales $4280.40, Inventory on hand September 30, 1940 $4289.60, Total Purchases for the month $2218.40, Inventory October 31, 1940 $3846.80, Rent $120.00, Advertising $160.00, Salaries $420.00, General Expense $128.00, Telephone and Telegraph $16.00, Electric Light $12.00, Delivery Expense $208.00.

Required: A profit and loss statement for the month ended October 31, 1940.

Problem 2

In completing your work for Mr. Daniel Morgan, you prepare a profit and loss statement showing the results of his operation for the year ended September 1, 1940. From a study of the books you learn that the total sales of gasoline, oil, and tires, and other miscellaneous items was $12,240.00. His stock on hand September 1, 1939 was $1260.00 and during the year he purchased further items totaling $8280.00. At September 1, 1940 the stock on hand was valued at $1860.00. He paid out $1350.00 for Salaries; $360.00 for Adver-

tising; $60.00 for General Expense items; $30.00 in interest charges, while the annual rent payments were $600.00.

Required: A profit and loss statement for the year ended September 1, 1940.

PROBLEM 3

To complete your work with the firm of Fraser and Thompson you are to prepare a profit and loss statement for the year ended October 1, 1940. An examination of their books reveals the following account balances. Total sales were $38,750.60, Return Sales $610.20, Inventory, balance October 1, 1939 was $2840.00 and at October 1, 1940 was $3600.00. Total Purchases for the year amounted to $30,054.00; there were, however, Purchase Returns of $420.00. There was $606.09 earned on Purchase Discounts. Total Interest Expense was $24.90. Expenses of Operation included the following: Salaries $4800.00, Advertising $840.00, Delivery Expense $1900.00, Telephone and Telegraph $64.00 and Rent $840.00.

Required: A profit and loss statement for the year ended October 1, 1940.

PROBLEM 4

Mr. H. Rockefeller has been in business for some time. The following accounts are taken from his general ledger and represent the condition of his business at November 1, 1940.

Purchases	$28,000.00
Sales	52,000.00
Inventory May 1, 1940	13,400.00
Purchase Returns	640.60
Purchase Discounts	260.00
Sales Returns	1,600.00
Sales Discounts	800.00
Freight & Cartage	920.00
Advertising	1,600.00
Salesmen's Salaries	4,280.00
General Office Salaries	3,920.00
Cash	12,435.00
Accounts Receivable	8,245.00
Accounts Payable	4,900.00
Reserve for Doubtful Accounts	821.00
Land & Buildings	24,000.00
Reserve for Dep. of L. & B.	720.00
Furniture and Fixtures	2,800.00
Reserve for Dep. of F. & F.	560.00
Notes Receivable	2,000.00
Interest Income	12.40
Notes Payable	3,600.00
Mortgage Payable	10,000.00
Interest Expense	114.00
Rockefeller, Capital	30,600.00
Inventory Nov. 1, 1940	12,210.00

Required: From the accounts above you are to prepare: (1) a profit and loss statement for the six-months period ended November 1, 1940; and (2) a balance sheet as of November 1, 1940, adding the profit you determine from the profit and loss statement to Mr. Rockefeller's Capital Account.

Problem 5

Mr. Daniel Morgan asks you to reconcile his capital account at September 1, 1940, with that of September 1, 1939. You have balance sheets as of both dates, also his profit and loss statement for the year ended September 1, 1940. Upon inquiry you find that Mr. Morgan has made no additional investments, but during the year his withdrawals totaled $2000.00.

Required: A statement of capital for Mr. Morgan as of September 1, 1940.

Problem 6

Mr. F. Brown asks you to prepare a statement of capital for him to prove his capital at December 31, 1940. You have checked his records and assembled the following facts. His capital at Dec. 31, 1939 was $13,419.15. During the year he made the following additional investments: May 1, 1940 $800.00, September 15, 1940 $1200.00, November 1, 1940 $1000.00. His drawings were $100.00 a week, totaling $5200.00 for the year. His Profit and Loss Statement for the year ended Dec. 31, 1940, showed a profit of $9240.25.

Required: A statement of capital for Mr. F. Brown as of December 31, 1940.

CHAPTER IV

THE LEDGER, ACCOUNTS, AND THE TRIAL BALANCE

INTRODUCTION

The preceding chapters have explained at some length the two principal statements used in business. The student at this point should have a clear understanding of the five principal groups of accounts studied. From his study of the balance sheet he should have a good knowledge of the three elements or groups of accounts found there: assets, liabilities, and net worth. From his study of the profit and loss statement just completed he should have a thorough knowledge of the remaining two principal groups of accounts: expense and income. He should also know the few mixed accounts studied, which might possibly be considered as a sixth group of accounts. In our plan of study we next take a step backward and see where all these accounts came from.

THE LEDGER

In a set of double entry books there are two types of records which must be maintained: books of original entry, or *Journals,* into which the original analysis of the business transactions are written, and books of final record or *Ledgers.* At the present time let us concern ourselves with only the latter group.

The ledger is the principal book of final record, and within its bounds is kept every account of the business.

It may take any of three forms: loose-leaf ledger, bound ledger, or card ledger. Each of these forms has certain advantages, and possibly certain disadvantages; one form will best suit one need, while another form will best suit another need. The loose-leaf form is superior to the bound type, for the pages may be moved about easily. This makes it possible to remove the ledger sheets and put them into a bookkeeping machine for entries, and then to replace them in their proper place. Accounts in a loose-leaf ledger which are inactive may easily be

removed to transfer binders so that the ledger need not be cluttered with a lot of deadwood.

The bound ledger is almost obsolete, except where there is fear that pages may be removed and possibly lost or stolen. The bound ledger, of course, cannot be used with bookkeeping machines.

The card ledger is similar to the loose-leaf ledger and has all its advantages. The so-called cards vary in weight from what might be termed by the layman as heavy " paper " up to cardboard. The card ledger is used often when a great many entries are to be made at regular or frequent intervals, as in the case of an installment house. Cards are easily handled, and their greater tensile strength gives them a distinct advantage over paper sheets. Today visible records are used a great deal. These vary considerably in form, their principal advantage, of course, being accessibility.

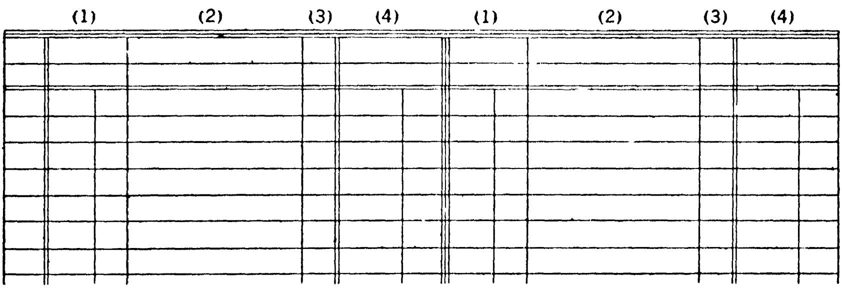
THE GENERAL LEDGER AND USE OF SUBSIDIARY LEDGERS AND CONTROL ACCOUNTS

The ledger may contain relatively few accounts, and may well consist of an inexpensive loose-leaf binder to contain the ledger sheets. On the other hand a large department store, in addition to its many general accounts, may have hundreds of thousands of customers' accounts to keep. In this case a bound ledger could hardly be considered. Cabinets would contain all customers' cards, and be kept in a separate bookkeeping department. There modern bookkeeping machines would be utilized to record the tremendous volume of transactions. Such a system would utilize a *General Ledger,* in which all the principal accounts of the store would be kept. The customers' accounts kept in a separate department, as described above, would form a subsidiary ledger, which would be controlled through a summary controlling account maintained in the *General Ledger.* Often, in a large organization, there might be several subsidiary ledgers, in addition to the *Customers'* or *Accounts Receivable Ledger* described above. Quite frequently there will be an *Accounts Payable Ledger,* and there might be a *Mortgage Ledger.*

In fact, in a well set up accounting system the *General Ledger*

is subdivided any time a group of similar accounts become numerous enough to warrant such division. For example, a manufacturing concern will often maintain a *Machinery and Equipment Ledger,* because it will have so many machines for which it feels it is best to maintain separate records. In every case when any group of similar accounts is removed from the *General Ledger,* a controlling account is replaced to show, in summary form, all that is contained in detail in the subsidiary ledger. This is because the *General Ledger* is the principal book of final record and all accounts of the business should be found within its bounds. If this is not possible, for one reason or another, and subsidiary ledgers are maintained, then, as shall be subsequently explained, summary accounts to control these subsidiary ledgers must be placed in the *General Ledger.*

TITLE OF ACCOUNT



In the illustration above, the top of the account is reserved for an appropriate heading or title. This title may simply be one word such as *Cash;* or, in the case of a customer's account, it might contain in addition to the customer's name, his address, and possibly his credit limit with the organization. The important rule to remember in naming accounts is to give them a title which will describe as accurately as possible what is to be kept within the account. The numbers appearing at the head of each division of the ruling do not appear on any ruled forms; they have been indicated simply as an easy method of identification in our explanation of an account. In the center of the page is a three-lined fancy ruling; this separates the two sides of an account, the debit from the credit. The debit side of an account will always appear on the left side, while the right-hand side is always reserved for the credit information.

Column 1 is reserved for the date of the transaction. The first part is used for the month and the narrow part for the day of the month. The year is written just above the month in small figures. After the month is once written it need not be repeated for the same month.

Column 2 is reserved for a very brief explanation. In many cases this column is left blank, because the folio number indicates where a complete explanation of the debit or credit may be found; however, many good bookkeepers still use the space for such key information as Purchase Order No. ——, or Invoice No. ——, or the due date on a note.

Column 3 is sometimes marked "F" or "LF," indicating ledger folio, for which this narrow space is reserved. In this column is written the page number of the journal from which the information was transferred.

Column 4 is the amount or money column. Here is entered the amount of the transaction as indicated in the journal; the wider space is for dollars while the narrower is for cents.

ACCOUNT DEFINED

In double entry bookkeeping an account may be defined as a record kept in the ledger, wherein are recorded financial data, classified technically according to debits and credits, pertaining to one asset, liability, capital, expense or source of income, for which the account is named.

ILLUSTRATION OF A TYPICAL ACCOUNT AND ITS FUNCTION

CASH

1940						1940					
Oct	1	Balance	√	2500	00	Oct	1	Rent for Month	1	100	00
	1	Cash Sales for day	3	150	00		1	Salary for week	2	300	00
	1	Received on acc't.	7	275	00		9	Express & Cartage	9	65	00
	31	Sundry Receipts for the Month	35	6500	00		15	Advertising	12	135	00
							31	Sundry disbursements	18	5000	00
								To Balance	√	3825	00
				9425	00					9425	00
Nov	1	Balance	√	3825	00						

Cash is a typical asset account. Listed on the left or debit side is the original cash invested, or the cash balance as of a

particular date, as in the illustration above, and all subsequent receipts of cash. On the opposite or credit side are listed all disbursements of cash. The account above has been formally balanced. The balance $3825.00 was written in on the credit side simply to balance; this is sometimes written in red ink. The balance is brought down on the debit side where it belongs, and is the balance of cash at the start of the new month. This balance indicates that there is on hand or in the bank $3825.00 worth of cash to the credit of the company. Just why the cash account is debited to show increases, and credited to show decreases, is the theme of our next chapter.

BALANCE TYPE OF ACCOUNT

Illustration No. 1

Another form of account in somewhat common use is known as the balance type, and employs three money columns instead of two, as in the standard form. The following is an illustration of the balance type of ledger account:

Name: Fred Smith *Credit Limit:* $200.00
Address: 25 James Road
Boston, Mass.

Date		Item	F	Debits		Balance		Credits		F	Items	Date	
19													
April	5	Sale	15	60	00	60	00						
						15	00	45	00	7	Cash	April	10
May	1	Sale	21	20	00	35	00						
	25	Sale	30	40	00	75	00						
						25	00	50	00	25	Cash	June	1

This form of ledger sheet is used quite extensively for personal accounts, particularly those of customers. The heading includes space for the customer's name and address and very often includes other data which will aid in handling the account in such matters as the customer's credit rating or credit limit as fixed by the credit department.

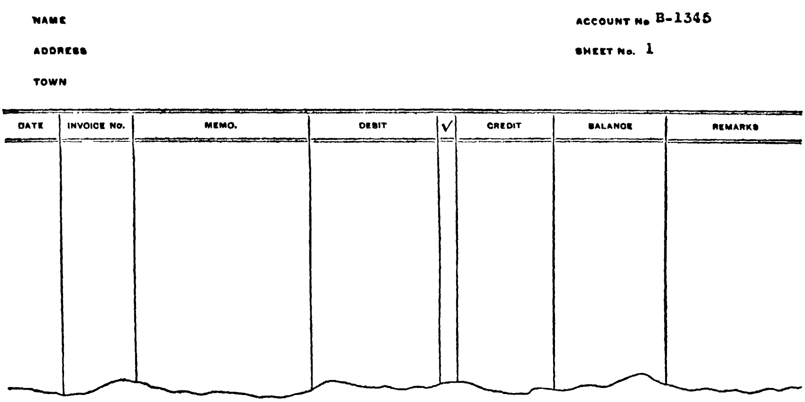
The balance type of account is superior to the standard form for customers' accounts because the balance due from the customer is available immediately. This form is very often used where bookkeeping machines are in use. The bookkeeper keeps

a carbon copy of the account which serves at the end of the month as a statement of the account. This saves a great deal of time in mailing statements to customers. When an account runs over a period of months, a new second sheet is inserted each month and only the balance due is copied in, after which only current items will appear. The account always remains in the ledger and each month a copy is mailed to the customer. By having envelopes already stamped and addressed, it is a very simple matter to get the monthly statements in the mail on the morning of the first day of the month.

The following ruling is another form seen frequently in practice. The superiority of this form over the standard ruled account is that it provides two columns for recording the balance of the account. As accounts usually have their balance on one side, in practice only one of the balance columns would be used for each type account. For example, as we shall see in the next chapter, all assets will have debit balances as in the case of the cash account previously illustrated, and all liabilities will have credit balances.

BALANCE RULING

Illustration No. 2



NAME

ADDRESS

TOWN

ACCOUNT No. B-1345

SHEET No. 1

DATE	INVOICE No.	MEMO.	DEBIT	√	CREDIT	BALANCE	REMARKS

The forms already illustrated are forms frequently used in business. Any special form, however, may be designed to meet peculiar requirements. No matter in what form the account may be, the fundamental principle of the account is always the same.

SOURCE OF ENTRIES

Entries in the ledger come from journals wherein are written the transactions in original form. The process of transferring the entries from the journals to the ledger is known as posting. In the journals the entries are analyzed into their proper form, of debit and credit, or series of debits and credits. In all cases in the journal the transactions result in total debits equalling total credits. Since this equilibrium is established in the journal, and since the debit and credit postings in the ledger equal the debits and credits in the journal, the only result can be a balance in the ledger. For, if equals are posted in the same order, it necessarily follows that equals will result in the ledger.

THE TRIAL BALANCE

A trial balance in double entry accounting may briefly be described as a list of the balances of accounts taken from the ledger, classified in two columns as debit and credit balances, the totals of which should be equal.

In a simple set of books where few entries are made and no complicated journals are used, there should be very little difficulty in keeping the books in balance. In larger businesses, where more complicated systems of books of original entry are employed, the posting is not so simple, and quite often errors will creep into the ledger and will appear in the trial balance.

The beginning student may often find the totals of his trial balance not equal. This may be true until he has gained experience through practice. A trial balance out of balance indicates that errors have been made somewhere, but nothing more. As a matter of fact, even when the totals are equal, the beginning student cannot be sure that no errors have been made. If complementary errors are made in the journal and posted properly, or if double posting of a correct entry is made, the trial balance will still reveal total debits equal to total credits. But the errors are there and in such a case must be located because the ledger would not reflect the true financial condition of the business.

The first step in preparing the trial balance is to be certain that all journal entries have been posted, and posted once only. Next, the money columns (debit and credit) are totaled in the

ledger with a fine pencil. This is usually kept up from day to day in the form of a running total. As each account is footed, the balance is extracted by subtracting the smaller amount from the greater and writing in small pencil figures the resulting balance on the greater side just next to the last entry. The next step is to copy down on two-column journal paper the name of every account having an open balance, and to list in the proper column the debit or credit balance of each such account. This may be done by hand or typed, and the adding machine used to total the columns if they are lengthy. If the purpose is merely to prove the ledger in balance, a satisfactory method is to run off on the adding machine first the open debit balances and then the credit balances, disregarding account names.

When the ledger is balanced, it is well to mark the letter of the month alongside the balance, as the starting place for subsequent investigation in case of future error. If this is done, only the current entries will have to be checked in order to locate any errors which may appear in a subsequent trial balance. It is good practice to preserve monthly trial balances for future use.

THE TRIAL BALANCE BOOK

Because trial balances are important, it is a good practice to keep these rather carefully. This is often done in practice by the use of an auxiliary record known as the trial balance book. This book, however, is not part of the accounting system proper. The usual form is a book into which is typed the names of all accounts kept in the ledger, leaving a few blank lines for new accounts. The page would contain twelve money columns, and thus be good for six months; or a twenty-four-column form could be used for twelve monthly trial balances.

FORMALLY BALANCING ACCOUNTS

Accounts are usually balanced in a formal manner only once each year unless there is some special occasion that necessitates it (such as the death of a partner, business consolidation, etc.). Monthly statements do not require that the accounts be formally balanced. The following illustration presents the formal balancing of a customer's account:

FRED SMITH

April	5	Sale		60	00	April	10	Cash Part Pmt.		45	00
May	1	Sale		20	00	June	1	Cash Part Pmt.		50	00
	25	Sale		40	00			To balance		25	00
				120	00					120	00
June	30	Balance brought down		25	00						

All accounts are balanced this way, usually once a year. For monthly purposes, however, the accounts are merely footed, and their balances indicated in small figures, usually in pencil.

THE "T" LEDGER ACCOUNT

In practice work, particularly on the blackboard, the formally ruled ledger account will be dispensed with and the so-called skeleton or "T" account substituted, simply to save time.

This form may be utilized by the student in a few of his exercises, although it cannot be emphasized too strongly that formally ruled paper makes for neatness and exactness too. In actual practice, untidy work cannot be tolerated.

THE LAYOUT OF A LEDGER

The science of accounting utilizes system to its highest possible degree. The layout of a ledger, therefore, should follow a definite order. In practice this order may vary, but a definite classification of accounts will be used in every system worthy of the name.

ILLUSTRATION OF CLASSIFICATION

The following illustration is presented, merely as a sample of what can be done, rather than as a model to be used by any or all business organizations, because there are particular prob-

lems which must be solved to meet particular needs for individual companies and therefore the ideal account classification must be "custom built."

Classification of Accounts

A. *Assets:*
- *a.* Current Assets:
  1. Cash
  2. Notes Receivable
  3. Accounts Receivable
  4. Inventories
  5. Temporary Investments
- *b.* Fixed Assets:
  1. Office Fixtures
  2. Machinery and Equipment
  3. Land
  4. Buildings
  5. Delivery Equipment
- *c.* Deferred Charges:
  1. Prepaid Insurance
  2. Prepaid Advertising
  3. Coal Inventory
  4. Postage Unused
- *d.* Other Assets:
  1. Good-will
  2. Patent Rights

B. *Liabilities:*
- *a.* Current Liabilities:
  1. Taxes Payable
  2. Wages Payable
  3. Notes Payable
  4. Accounts Payable
  5. Deferred Credits to Income
- *b.* Fixed Liabilities:
  1. Mortgage Payable
  2. Bonds Payable

C. *Reserves for:*
1. Doubtful Accounts
2. Depreciation of Buildings
3. Depreciation of Machinery & Equipment
4. Depreciation of Delivery Equipment

D. *Net Worth Accounts:*
1. Capital Stock
2. Surplus

E. *Sales Group:*
1. Sales
2. Returned Sales
3. Sales Allowances

F. *Cost of Goods Sold Group:*
1. Purchases
2. Purchase Returns
3. Freight & Cartage Inward

G. *Selling Expenses:*
1. Advertising
2. Salesmen's Salaries
3. Traveling Expense
4. Delivery Expense
   - *a.* Drivers' Salaries
   - *b.* Depreciation of Delivery Equipment
   - *c.* Gas & Oil
   - *d.* Repairs

H. *General & Administration Expenses:*
1. Rent
2. Taxes
3. Light, Heat, & Power
4. Insurance
5. Office Salaries
6. Postage
7. Telephone and Telegraph
8. General Expense

I. *Non-Operating Income*
1. Purchase Discounts
2. Interest Earned
3. Rental Income

J. *Non-Operating Expense*
1. Sales Discounts
2. Interest Expense

In the classifications above the different groups were coded by use of Capital Letter, no regard being made of the groups except sequence. Sometimes *C. A.* may be used to designate

Current Assets; F. A., Fixed Assets. The separate accounts making up the groups may then be numbered as above. The decimal system numbers the groups, and then by use of a decimal point marks off the separate accounts of a group as: 1.1 might designate the cash account, 2.1 office fixtures. The student can readily see how variation might be adopted and similar coding used to advantage. No attempt is made here to give an exhaustive treatment on the coding of accounts. Several cost accounting texts devote considerable space to this topic. The foregoing merely illustrates the possibilities of coding and classifying accounts. When such a classification is followed, the general ledger is laid out following this order, and a trial balance prepared from such a ledger greatly facilitates the preparation of the balance sheet, and the profit and loss statement.

The classification for the balance sheet given above follows what is known as the order of liquidation, where the most liquid assets are listed first, followed by the fixed or permanent assets. On the liability side of the balance sheet the same order is followed.

QUESTIONS ON THE CHAPTER

1. Define: (*a*) account, (*b*) ledger, (*c*) trial balance.
2. Rule the standard form of account, and illustrate with some account with which you are familiar.
3. If the totals of the debit and credit side of a trial balance are equal, is that positive evidence that the work for the period has been done correctly? Explain.
4. What should the title of an account indicate?
5. Has the balance form of ledger account any advantage over the standard form? Explain.
6. Explain why the ledger should always be in balance.
7. Explain the procedure of taking a trial balance.
8. When are accounts formally balanced?
9. What is the purpose of a *Trial Balance* book?
10. What is the use of the " T " ledger account?
11. Why should a ledger be laid out in a definite order? Discuss fully.
12. Explain the process of posting.
13. What do you understand by " footing " an account?
14. Mention two bookkeeping errors which a beginning student might make, which would not throw the ledger out of balance, and therefore not be revealed by a trial balance.

15. What rule should be applied in naming an account?
16. Explain the functions of a *Cash Account*.
17. Explain the use of the folio column in the ledger account.

PROBLEM MATERIAL

Problem 1

Mr. J. Harvey had a cash balance of $1242.10 at November 1, 19—, and had the following cash transactions during the month of November. November 1, paid one month's rent $100.00; November 3, paid salaries $180.00; November 4, received a check from Mr. T. Clark $116.00 and paid the monthly telephone bill $16.00. November 5, received a check $210.00 from Mr. J. Jones. November 8, paid $25.00 for postage and received a check $114.40 from Mr. F. Smith. November 11, paid Blouth and Co. account in full $940.00, received $195.80 from Mr. Brown. November 16, a check was received from M. H. Clews $300.00. November 17, paid salaries $180.00. November 18, a check was received from S. Metz, his account in full $589.00. November 21, gave a check for advertising $40.00; November 24, received a check from L. Cohen $210.00, and sent a check to Cooper Co. $480.00. November 29, a check was received from S. Steel $118.20. November 30, paid salaries $180.00; the cash sales for the month totaled $564.06.

Required: Draw a " T " account for Mr. Harvey. Enter the November 1 balance, list the cash receipts and disbursements given above and balance the account, as in the illustrations on page 44.

Problem 2

Mr. Thomas Rowland is one of your customers. You have made the following sales to him during the year. January 2, $150.00; February 7, $120.00; March 27, $160.00; April 4, $210.00; May 15, $180.00; July 17, $200.00; September 2, $190.00; October 15, $240.00; November 11, $260.00 and December 5, $320.00. During the same period you have received the following checks from Mr. Rowland. January 11, $150.00; February 15, $120.00; April 15, $370.00; June 2, $180.00; September 12, $390.00; October 25, $240.00; November 22, $260.00.

Required: Prepare a standard ruled ledger account and enter the customer's transactions as given above. Balance and rule the account as of December 31, similar to the illustration on page 49 of your text.

Problem 3

In your business you have made the following purchases from the New York Wholesale Company. January 4, $1600.00; March 9,

$2000.00; May 6, $2200.00; June 12, $800.00; September 2, $1800.00; November 6, 2840.00.

Your payments during the same period have been as follows: January 13, $1600.00; March 18, $2000.00; May 15, $2200.00; June 12, $800.00; September 11, $1800.00.

Required: Prepare a standard ruled account for the New York Wholesale Co. as it should appear in your ledger. Purchases are to be listed as credits and payments made to the New York Wholesale Co. listed as debits. Rule and balance the account as of December 31.

Problem 4

At December 31, the ledger of John Hoag reveals the following accounts and balances. Cash debit balance $5350.00; Notes Receivable debit balance $3000.00; Purchases debit balance $6000.00; Thomas Rowland debit balance $320.00; James Smith debit balance $600.00; Frank Thomas debit balance $810.00; Samuel Cohen debit balance $200.00; Merchandise Inventory debit balance $4000.00; New York Wholesale Co. credit balance $2840.00; Trenton Wholesale Co. credit balance $1620.00; Philadelphia Co. credit balance $1440.00; Sales credit balance $10,000.00; Land and Buildings debit balance $10,000.00; Mortgage Payable credit balance $6000.00; John Hoag Capital credit balance $6380.00; Notes Payable, credit balance $2000.00.

Required: Given the foregoing accounts, list the accounts and balances as debits and credits in a trial balance.

Problem 5

The following accounts were taken from the ledger of F. Marshall at November 1, 1940. Accounts Receivable debit $16,000.00; Accounts Payable credit $18,000.00; Purchases debit $24,630.20; Sales credit $28,900.60; Purchase Returns credit $420.40; Sales Returns debit $540.00; Purchase Discounts credit $294.00; Sales Discounts debit $124.00; Salaries debit $3450.00; Insurance Expense debit $916.00. Inventory May 1, 1940 debit $6890.80; Notes Receivable debit $2000.00; Notes Payable credit $4800.00; Mortgage Payable credit $12,000.00; Interest Expense debit $216.00; Interest Income credit $148.00; Cash debit $3280.00; Advertising debit $690.00; Delivery Equipment debit $3600.00; Land and Buildings debit $18,000.00; Taxes debit $1200.00; F. Marshall Capital credit $16,974.00.

Required: Given the accounts above, list the accounts and balances as debits and credits in a trial balance.

CHAPTER V

FUNDAMENTALS OF DEBIT AND CREDIT

INTRODUCTION

If we were to trace the origin of the terms debit and credit, we should find that they come from the Latin, *debit* from *debitum* meaning *debt*, and *credit* from *credere* meaning *believe* or *trust*. These meanings were significant in the days of single entry bookkeeping, when most accounts were kept with persons. It was then quite satisfactory to say " We debit to show a person in our debt," and " We credit a person when he trusts us."

Today, however, the terms debit and credit have a more definite and limited meaning. As we saw in the last chapter, an account has two sides, debit and credit. In double entry bookkeeping, the left-hand side of the account is reserved for recording debits, as the right-hand is similarly reserved for recording credits. The terms debit and credit are also used to indicate changes, increases or decreases, which may take place in accounts. While each account will have the same form, and debit information will always be placed on the left-hand side of every account and credit information always placed on the right-hand side of the account, the debit and credit sides of each different group of accounts will have a different significance. As we shall learn presently, the debit side of an asset account is reserved to register increases, and the credit side, decreases. Similarly, since liability accounts are just the opposite to asset accounts, the two sides will have (logically) exactly the opposite meanings. For asset ownership claims, liabilities and net worth accounts the credit side is always reserved to register increases, while the debit side is always used to record decreases.

FUNDAMENTAL RULE FOR DOUBLE ENTRY

In double entry bookkeeping, the only system used in modern business, each transaction when properly analyzed will always reveal a twofold exchange in values. For instance, suppose a company were to buy a new delivery truck for $1000.00. In accounting for this transaction we would say there had been an

equal exchange in values. The purchaser received a truck but gave up one thousand dollars. The proper accounting for this transaction would require the use of two accounts, an automobile truck account and a cash account; and, as we shall see presently, the auto truck account will be debited (to record an increase in an asset), while the cash account will be credited (to record a decrease in another asset). The monetary values in each instance being equal (one thousand dollars), the accounting result is a debit of \$1000.00 offset by an equal credit of \$1000.00. This fundamental rule of equal debit and credit never varies, no matter how complex the transaction may seem. The basic rule must always prevail; and, when all factors are considered, the net result will be debit or debits, the totals of which must be equaled by one or more credits, the total of which must again be equal. This rule may never be violated.

REAL AND NOMINAL ACCOUNTS

Before we progress further in an attempt to evolve the rules which are now in use in double entry bookkeeping, it will be well to explain briefly the relation between the several groups of accounts. This understanding will be helpful in explaining the rules for debiting and crediting. The term *real account* is an expression long in use to describe balance sheet accounts, and was probably first used because such accounts are the more permanent accounts, and are used to measure the true value of the business. On the other hand, the term Nominal accounts, also in use for many years, designates expense and income accounts. The term was first used, no doubt, because these accounts are of a temporary nature. They are used to gather the expenses and income for a period, after which they are closed, and the net result, a profit or a loss, transferred to the proprietor's capital account. The accounts thus cleared are made ready for use again in the next accounting period; therefore, because of their temporary nature, the term nominal was no doubt applied to these two groups.

Some students of accounting have gone so far as to say that there are only three groups of accounts: Asset, Liability, and Net Worth accounts. They say that Nominal accounts, in fact, are only temporary subdivisions of the proprietor's capital ac-

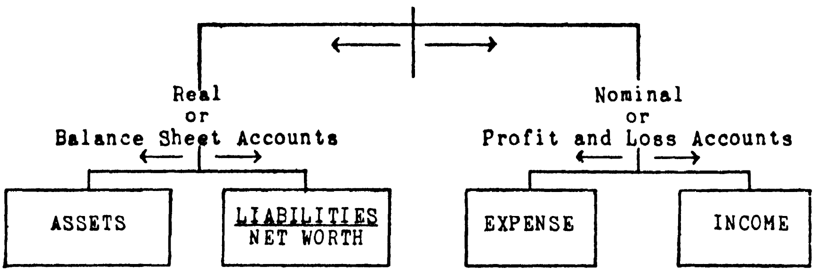
count. While we recognize the truth of this statement of pure theory, and will utilize this fact in presenting the rules for debiting and crediting, we must nevertheless recognize the importance of nominal accounts and grant to them the dignity of separate groups.

CHART OF ACCOUNTS

The chart illustrated below is to be used as an aid in presenting the rules for debiting and crediting:

CHART OF ACCOUNTS

All Accounts



Normally Debit Balances	Normally Credit Balances	Normally Debit Balances	Normally Credit Balances
Debited to show increases Credited to show decreases	Credited to show increases Debited to show decreases	Debited to show increases Credited to show decreases	Credited to show increases Debited to show decreases

A study of the chart above indicates that all accounts may be divided into real and nominal accounts; and also that these two major divisions are again divided; the real accounts are separated into *Assets* on one side and, directly opposite, *Liabilities and Net Worth.* Note also that the *Nominal Accounts* are divided in a similar manner: *Expense* on one side and, directly opposite, the *Income* group. Note too that this is the relationship which was presented and explained in our first two chapters.

RULES FOR DEBITING AND CREDITING ASSETS

On the above chart under each group is listed the normal balance for each type of account. Assets have normally debit balances. By that we mean, excepting abnormal conditions in a business, because of the long established method of debit-

ing and crediting accounts; asset accounts must always have their balance on the debit side, i.e., the debits must exceed the credits. For example, we shall presently see that asset accounts are debited to show increases, and credited to show decreases; therefore, taking the cash account as a typical asset, the debits or increases from receipts must always exceed the credits or decreases from disbursements. As the cash account usually represents the condition of the bank account, one can readily see how impossible it would be, in actual practice, to have a credit balance in the account. Such an abnormal situation would represent an overdrawn bank account, and even the beginning student can recognize what a slim chance the business man would have of maintaining this position for any length of time.

In any science a beginning point must be established and used as a basis of the demonstration. In our case, starting with cash as a typical asset account, we shall ask our readers to accept as true just one point to begin with: namely, that to register increases in asset accounts we debit the account. As a matter of fact, there is no reason, except long established custom, why debits must be used to register increases; we could just as well show increases with credits. But if we did this, because our science is a very logical one, we should have to reverse everything else. We should have to show, for instance, decreases in assets as debits. Since absolutely nothing would be gained, no one would think of making such a change and upsetting a custom of such long standing.

With our first point taken for granted — namely, that in asset accounts increases are registered with debits — logically, the opposite side of the account or credit side should be reserved for recording decreases. Thus we have our first rule: for asset accounts: *Record all increases on the Debit side and all decreases on the Credit side.*

RULES FOR DEBITING AND CREDITING LIABILITY AND NET WORTH ACCOUNTS

Inasmuch as liability and net worth accounts as a group are directly opposite to the asset group just studied, one would expect to find the rules for debiting and crediting in these groups

exactly opposite to those for assets, and that is the very situation. To show increases in a liability or net worth account, you credit; while to show decreases, you debit. The rules for debiting and crediting liability and net worth accounts are exactly the same, because these two groups of accounts, although legally quite different, are similar as far as other qualities are concerned.

RULES FOR DEBITING ASSETS, LIABILITIES AND NET WORTH APPLIED AND ILLUSTRATED

(A) Transactions Analyzed

Recalling our fundamental rule of double entry, " For every debit we must have an equal credit," and the rules for debiting and crediting Assets, Liabilities and Net Worth just presented they may now be restated in their shortest form:

Assets	Liability and Net Worth
+ = Dr.	+ = Cr.
— = Cr.	— = Dr.

Let us now put these rules to use with a few transactions involving three types of accounts.

Transaction No. 1. — Suppose Mr. B. Black wishes to start in business and invests $5000.00

The asset *Cash* is increased, while *Mr. Black's Capital Account* is also increased. Applying our rules, this will result in a debit to *Cash* to register the increase, and a credit to *Black's Capital Account* to show the establishment of the capital account, which is an increase from zero to $5000.00.

Transaction No. 2. — Suppose Mr. Black now purchases some store equipment for $800.00 cash. Here the asset *Store Equipment* has been increased, but the asset *Cash* has been decreased. This must therefore result in an increase or debit to *Store Equipment* and a credit to *Cash.*

Transaction No. 3. — Suppose Mr. Black borrows $1000.00 from the bank on his note, payable in sixty days. Here an asset, *Cash,* has been increased, but a liability in the form of *Notes Payable* is also increased. This will result in a debit to *Cash,* and a credit to *Notes Payable.*

Transaction No. 4. — Suppose Mr. Black purchases a light delivery truck for \$1000.00, paying \$400.00 in cash and the balance on finance notes. This will increase his assets, *Delivery Equipment,* which will be debited, while *Cash* has been decreased \$400.00 and must therefore be credited; the other \$600.00 is credited to the *Notes Payable* account, because in signing these finance notes a liability is increased. This is our first compound entry, one debit offset by two credits, the totals of which, however, must be equal.

Transaction No. 5. — Suppose Mr. Black purchases a building containing a store in which he will conduct his business. The contract price is \$3000.00, for which Black pays out \$1000.00 in cash and gives a mortgage for the balance. This transaction will increase Mr. Black's assets, *Land and Buildings,* \$3000.00. His cash has been reduced \$1000.00, while a new liability, *Mortgage Payable,* has been established for \$2000.00, resulting in another compound entry. A debit to *Land and Buildings,* \$3000.00, and a credit to *Cash,* \$1000.00, and a credit to *Mortgage Payable,* \$2000.00.

(B) Transactions Posted

In order to complete our illustration, let us post these five transactions to the accounts indicated in the analysis above. using transaction numbers for folio references.

Dr. +		Cash	Cr. −
(1) Investment	\$5000.00	(2) Store Equip.	\$ 800.00
(3) Borrowed on note	1000.00	(4) On Auto	400.00
		(5) L. & B.	1000.00

Dr. +		Store Equipment	Cr. −
(2) Purchased for cash	\$ 800.00		

Dr. +		Delivery Equipment	Cr. −
(4) Purchase	\$1000.00		

Dr. +	Land and Building		Cr. −
(5) Purchase	$3000.00		

Dr. −	B. Black, Capital		Cr. +
		(1) Cash invested	$5000.00

Dr. −	Notes Payable		Cr. +
		(3) Borrowed on note	$1000.00
		(4) Finance notes	600.00

Dr. −	Mortgage Payable		Cr. +
		(5) On building	$2000.00

If we were now to balance the accounts above we should get the following trial balance:

Cash	$3800.00	
B. Black, Capital		$5000.00
Notes Payable		1600.00
Store Equipment	800.00	
Mortgage Payable		2000.00
Delivery Equipment	1000.00	
Land & Building	3000.00	
	$8600.00	$8600.00

Thus we have put our rules affecting real accounts to work for us and have noticed the fundamental rule of double entry also proved in application.

RULES FOR DEBITING AND CREDITING NOMINAL ACCOUNTS

It was stated in the first part of this chapter that nominal accounts are often thought of as temporary subdivisions of the proprietor's capital account. We shall now put this truth to

work for us in demonstrating the rules for expense and income, and to show the relationship which does exist between nominal accounts and the proprietor's capital account.

If we should admit, even for the sake of argument, that nominal accounts may be considered part of the proprietor's capital account, then expenses would reduce capital, and income would tend to increase capital; and over a period of time if a man's income were greater than his total expenses, his capital would increase. The proprietor's account would then appear as follows:

Dr. −	B. Black, Capital		Cr. +
Purchases	$1800.00	Investment	$5000.00
Taxes	140.00	Sales	2400.00
Insurance	100.00	Rental Income	200.00
Salaries	500.00	Interest Income	10.00
Interest Expense	60.00		

A summary would indicate for the current period a gain of $10.00 which would increase Mr. Black's capital to $5010.00. This profit would be increased by an adjustment for inventory, but for our present discussion this is not important.

This manner of determining the proprietor's profit or loss, although correct in fundamental theory, is, however, neither practicable nor desirable, because such procedure would clutter the capital account with much miscellaneous detail. The few expense and income items used in the foregoing account are merely typical. If all expenses and income items were entered in the capital account, the result, when the time arrived to close the books, would be of little value. It would lack the important element of classification. We must, therefore, give to expense and income the dignity of separate accounts.

Nevertheless, the illustration should make it clear that expenses decrease capital, and income increases it. The rules for debiting and crediting the capital account, it will be recalled, briefly stated, were:

To increase, credit the capital account.
To decrease, debit the capital account.

Therefore, if expenses decrease capital, expense accounts logically should have debit balances; and income accounts, since they increase capital, logically should have credit balances. If

the student will again glance at the Chart of Accounts, he will observe this condition.

Expense and income accounts are primarily one-sided accounts. The rules for debiting and crediting expense and income accounts may be summarized briefly, thus:

> To increase an expense account, debit.
> To decrease an expense account, credit.
> To increase an income account, credit.
> To decrease an income account, debit.

TRANSACTIONS INVOLVING EXPENSE, INCOME, AND OTHER ACCOUNTS

Transaction No. 6. — Suppose Mr. B. Black purchased during his first month's business merchandise totaling $1800.00, on account. Here an increase in the expense *Purchases* will result in a debit, while taking the merchandise on credit will result in an increase in the *Accounts Payable*, and therefore a credit.

Transaction No. 7. — Suppose Mr. Black paid $140.00 in cash for taxes due on his building. This transaction increases an expense and is therefore debited to the *Taxes* account, and is credited to the *Cash* account because the fund of cash is reduced.

Transaction No. 8. — Suppose Mr. Black collected $200.00 rental income from tenants on floors above his store. This is an increase in his asset *Cash* and at the same time an increase to the *Rental Income* account; a debit to *Cash* and a credit to *Rental Income*.

Transaction No. 9. — Suppose Mr. Black paid $100.00 for insurance on his building and stock. This transaction decreases his fund of cash and at the same time increases his expenses in form of insurance. Therefore a debit should be recorded in the *Insurance* account and a credit to the *Cash* account.

Transaction No. 10. — Suppose Mr. Black paid $500.00 as salaries for the month. This transaction also reduces the fund of cash, and at the same time increases an expense, *Salaries*, by an equal amount. Therefore, a debit to *Salaries*, and a credit to *Cash* should be recorded.

Transaction No. 11. — Suppose during the month Mr. Black had sales in total of $2400.00, which, let us suppose, was made

up of $1600.00 in sales on account and $800.00 in cash sales. These sales transactions in summary then would result as follows: an increase in asset, *Cash* $800.00, an increase in asset *Accounts Receivable*, $1600.00; while at the same time *Sales Income* is increased $2400.00.

A compound entry would result: a debit to *Cash*, $800.00, and a debit to *Accounts Receivable*, $1600.00, offset by a credit to the *Sales* account in total $2400.00.

Transaction No. 12. — Suppose Mr. Black paid $60.00 interest. This transaction illustrates a reduction in cash due to interest expense, therefore a debit to *Interest Expense* and a credit to *Cash.*

Transaction No. 13. — Suppose Mr. Black collected $10.00 in cash as interest income. This transaction, the opposite of No. 12, indicates an increase in the *Cash* account and at the same time an increase in the *Interest Income* account. The resulting debit would be to *Cash,* and the credit to *Interest Income.*

TRANSACTIONS POSTED

In order to complete our illustration, the accounts as we left them after transaction 5 are reproduced below, together with the new transactions, 6 through 13. Again transaction numbers have been used as folio references, and the student should trace through each transaction.

Dr. +		CASH	Cr. −
(1) Investment	$5000 00	(2) Store Equipment	$ 800.00
(3) Borrowed on note	1000.00	(4) On Auto	400.00
(8) Rental Income	200.00	(5) L. & B	1000.00
(11) Cash Sales	800.00	(7) Taxes	140.00
(13) Interest Income	10.00	(9) Insurance	100 00
		(10) Salaries	500.00
		(12) Interest Expense	60.00

Dr. −		B. BLACK, CAPITAL	Cr. +
		(1) Cash Investment	$5000.00

Dr. −		Notes Payable		Cr. +
			(3) Borrowed on note	$1000.00
			(4) Finance notes	600.00

Dr. +		Store Equipment		Cr. −
(2) Purchase	$800.00			

Dr. +		Delivery Equipment		Cr. −
(4) Purchase	$1000.00			

Dr. +		Land and Building		Cr. −
(5) Purchase	$3000.00			

Dr. +		Purchases		Cr. −
(6) Total	$1800.00			

Dr. +		Taxes		Cr. −
(7) Cash	$140.00			

Dr. +		Insurance		Cr. −
(9) Cash	$100.00			

Dr. +		Salaries		Cr. −
(10) Cash	$500.00			

Dr. +	Interest Expense		Cr. −
(12) Cash	$60.00		

Dr. −	Mortgage Payable		Cr. +
		(5) On Building	$2000.00

Dr. −	Sales		Cr. +
		(11) Total	$2400.00

Dr. −	Rental Income		Cr. +
		(8) Cash	$200.00

Dr. −	Interest Income		Cr. +
		(13) Cash	$10.00

Dr. −	Accounts Payable		Cr. +
		(6) Purchase on account	$1800.00

Dr. +	Accounts Receivable		Cr. −
(11) Total on account	$1600.00		

The following trial balance taken from the accounts above indicates that the entries have been posted correctly, and that the ledger is in balance.

TRIAL BALANCE

Cash	$ 4,010.00	
B. Black, Capital		$ 5,000.00
Notes Payable		1,600.00
Store Equipment	800.00	
Delivery Equipment	1,000.00	
Land and Buildings	3,000.00	
Purchases	1,800.00	
Taxes	140.00	
Insurance	100.00	
Salaries	500.00	
Interest Expense	60.00	
Mortgage Payable		2,000.00
Sales		2,400.00
Rental Income		200.00
Interest Income		10.00
Accounts Payable		1,800.00
Accounts Receivable	1,600.00	
	$13,010.00	$13,010.00

RULES IN SUMMARY FORM

The rules stated in this chapter are all that is necessary for the student to know in analyzing and classifying transactions into their proper debits and credits. These rules are now stated in their briefest form as follows:

Assets
To increase, debit.
To decrease, credit.

Liability and Capital
To increase, credit.
To decrease, debit.

Expense
To increase, debit.
To decrease, credit.

Income
To increase, credit.
To decrease, debit.

QUESTIONS ON THE CHAPTER

1. Define: (*a*) real accounts; (*b*) nominal accounts.
2. (*a*) State the rule for debiting and crediting asset accounts.
   (*b*) State the rule for debiting and crediting liability accounts.
   (*c*) State the rule for debiting and crediting capital accounts.
   (*d*) State the rule for debiting and crediting expense accounts.
   (*e*) State the rule for debiting and crediting income accounts.
3. State the fundamental rule of double entry bookkeeping.

4. Give a transaction involving:
   (*a*) An increase in an asset and an increase in income.
   (*b*) An increase in an asset and an increase in a liability.
   (*c*) A decrease in one asset and an increase in another asset.
   (*d*) An increase in expense and a decrease in asset.
   (*e*) An increase in net worth and a decrease in a liability.
5. What do you understand by the normal balance of an account? Explain and illustrate.
6. What are the normal balances for the five groups of accounts?
7. Mr. Proprietor borrows $2000.00 in cash from the bank for use in his business.

   He admits cash is increased and should be debited, but believes his capital account should be increased as an additional investment. Do you agree? Why?
8. (*a*) What is the reason for showing increases in asset accounts on the debit side?
   (*b*) Could this procedure be entirely reversed?
   (*c*) Would you approve of reversing the procedure? Why?
9. Explain the origin of the terms *real* and *nominal*.
10. Can you justify the statement "Expense and Income Accounts are only temporary subdivisions of the Proprietor's Capital Account"?

PROBLEM MATERIAL

Problem I

Analyze the following selected transactions in the same manner as was done in the illustrative exercise; writing a paragraph showing the analysis as an increase or decrease, in asset, liability, net worth, income or expense account, together with the resulting debit and credit.

Transaction No. 1.
Mr. Frederick Jones starts business with a cash investment of $4200.00.

Transaction No. 2.
He pays $100.00 rent for one month.

Transaction No. 3.
He pays $600.00 cash to the New York Store Supply Co. for furnishing his store with fixtures.

Transaction No. 4.
A purchase of merchandise arrives from the Martin Supply Co. billed on 30 days credit $720.00.

Transaction No. 5.
He pays $16.00 cash for express on this shipment.

Transaction No. 6.
A shipment is received, purchased from the Gordon Co. on 30 days' credit $1200.00.

Transaction No. 7.
First day's business sold for cash $126.00.
Transaction No. 8.
Sold on 30 days' credit $64.00 to Thomas Phillips.
Transaction No. 9.
Sold on 30 days' credit to H. Boyle $90.00.
Transaction No. 10.
Paid $25.00 for an advertisement in the *Local News.*
Transaction No. 11.
Gave a $5.00 check to window cleaner for services rendered.
Transaction No. 12.
Purchased a new auto truck $1200.00, paid for as follows: gave a check $400.00 and a note $800.00.
Transaction No. 13.
Another purchase arrived from the Martin Supply Co. $600.00 on 30 days' credit.
Transaction No. 14.
Gave the Martin Supply Co. our check for $720.00.
Transaction No. 15.
Received a check from Thomas Phillips $64.00.

Required:
(1) Analyze the transactions above as directed.
(2) Post the resulting debits and credits to appropriate ledger accounts.
(3) Take a trial balance.

Problem 2

Analyze the following selected transactions in paragraph form, as was given in the text illustration.

Transaction No. 1.
Mr. M. Murphy starts business with a cash investment of $3000.00.
Transaction No. 2.
He borrows $1000.00 from the Local National Bank, who accepts his 60 days' note.
Transaction No. 3.
He purchases shelving and store equipment from the Standard Equipment Co. on 90 days' credit total $640.00.
Transaction No. 4.
He purchases a used cash register for his store paying $40.00 cash.
Transaction No. 5.
He purchases merchandise $480.00 from the American Supply Co. on 30 days' credit.
Transaction No. 6.
He pays $60.00 cash for an advertisement in the *Home News.*
Transaction No. 7.
His cash sales for the day were $210.00.

Transaction No. 8.
He sold to F. Kiley $20.00 on 30 days' credit.

Transaction No. 9.
He had shelves put in his store, for which he paid $75.00 cash.

Transaction No. 10.
Another purchase arrived from the American Supply Co., $520.00 on 30 days' credit.

Transaction No. 11.
Sold to J. H. Dunn on account $40.00.

Transaction No. 12.
He sends a check $480.00 to the American Supply Co.

Transaction No. 13.
He buys a new typewriter $125.00 from the N. B. Typewriter Exchange on 90 days' credit.

Transaction No. 14.
He purchases a used office desk for cash $16.00.

Transaction No. 15.
Cash sales for the day were $120.00.

Transaction No. 16.
Sales on account as follows: J. H. Dunn $60.00; T. Lamb $28.00; F. Scott $60.00.

Required:
(1) Analyze the transactions above as directed.
(2) Post the analysis to appropriate ledger accounts.
(3) Take a trial balance.

CHAPTER VI

THE GENERAL JOURNAL AND BUSINESS PAPERS

INTRODUCTION

The material thus far presented has been of an introductory character. One of the chief purposes was to give the beginning student a strong foundation upon which he might build the work of constructive accounting about to be presented. In this chapter we shall study the *General Journal,* one of the primary books of original entry used in double entry bookkeeping. We shall also introduce a few business papers and study their use in practice.

THE GENERAL JOURNAL

In the last chapter a series of transactions was analyzed into their debits and credits, and the result of this analysis was recorded directly to the ledger. This was done simply to drive home the rules for debiting and crediting. In practice the result of each transaction must be recorded in some book of original entry before it may be placed in the ledger. In double entry this book is known as a journal.

Historically the modern journal is an outgrowth of the old day book used in single entry bookkeeping. This record was a veritable history of the business. A complete chronological record of every transaction was written into the book so that it was very much like a ship's log.

The modern general journal, as operated in a double entry system of records, keeps the same chronological record of each transaction, but, as shown in the last chapter, each transaction yields a twofold result. This analysis must be recorded formally in the journal, and the accounts to be debited and credited indicated together with an appropriate explanation of the transaction. The explanation may be very brief, or complete details may be given, because this record is the first basic recording of the transaction; and, if referred to in the future, the explanation should recall all details of the entire transaction.

1940				F	DEBIT		CREDIT	
Oct.	1	Cash		1	750	00		
			B. Stone Capital	15			750	00
		Investment, cash deposited First Nat'l Bank						
	2	Rent		60	125	00		
			Cash	1			125	00
		October rent, check No. 1						

GENERAL JOURNAL ILLUSTRATED AND EXPLAINED

The illustration above is from a standard ruled two-column general journal. The first two columns on the left are used to record the date of the transaction. The next wide space to the right is provided for the analysis of the transaction. Here the accounts to be debited and credited are written as in the foregoing illustration. The next narrow column is used to record the folio or number of the ledger pages to which the accounts designated are to be posted. In the illustration above the Cash account might be ledger account Number 1, and a small 1 should be written in the journal folio column. In the folio column of the ledger page another 1 would be written, as the entry comes from page 1 of the journal. The Rent account might occupy page 60 or 70 in the ledger, and that page number should be written in the journal folio. In the Rent account folio column a 1 would be written because this entry also comes from page 1 of the journal. The importance of the proper use of these little columns was mentioned before, but another reminder may be helpful.

The two money columns on the extreme right are provided for the debit and credit amounts. The left-hand money column is reserved for debits only, while the right-hand column is similarly reserved for credits only. Note also, in the illustrations above, that the debits are always written on the first line, and the credits on the next line below, indented sharply to the right. This is a form used since the two-column journal was first introduced. The amount of space left for indentation depends upon the size of the paper used; the important point to observe, however, is that the indentation be marked.

In a compound entry, to be illustrated presently, all the debits

COMPOUND JOURNAL ENTRY ILLUSTRATED

1940 Nov.				Debit		Credit	
	15	Cash		4600	00		
		Furniture and Fixtures		2000	00		
		Automobile Truck		1200	00		
		Merchandise Inventory		3200	00		
			Notes Payable			1800	00
			John Kern Capital			9200	00
		Cash deposited in the Citizens National Bank.					
		Furniture and Fixtures are valued at cost					
		less accumulated depreciation. The Auto-					
		mobile truck was purchased October first.					
		The inventory consists of all saleable					
		merchandise and is valued at cost which					
		is less than present market prices. The					
		note is payable to the Citizens National					
		Bank and payable December 30.					

are written directly next to the date line, one right under the the other, while the credits are each indented the same distance and are written directly following the last debit.

On the next line, after the last credit, an explanation of the transaction should be recorded. This explanation will vary in length, as was stated above, and only experience will tell how much should be written in this space. If the entry were to record a sale of a bill of goods to a customer on credit; and an invoice were written completely listing each item sold, giving credit information and all the details necessary for the transaction and the invoice is numbered and filed away for safe keeping; then, if a bookkeeper were simply to write in the invoice number, that would be a perfect explanation. Such an invoice, a copy of which is always sent to the customer, is documentary evidence of the merchandise sent. This form will be presented presently.

It is a very good idea to skip a line between entries; and if a heavy line is ruled on the line skipped, then each transaction will stand out, and there will be no question as to where one entry ends and the next begins. Note also that the entries are written in the journal in a strict chronological order. The date written in the journal is the date of the transaction and not the date entered, because in some busy offices entries will sometimes be written into the journals two or three days after the trans-

actions have taken place. Another important observation the student should make is that the debits in total must always equal the credits in each transaction. This equilibrium started in the journal is, of course, maintained in the ledger; and for this reason the ledger should always be in balance, and a trial balance should always have total debits offset by credits of an equal amount. This is simply the carrying out of our fundamental rule of double entry, that each and every transaction, when properly analyzed, must yield equal debits and equal credits.

In the foregoing illustration four separate debits are listed because John Kern is placing four different assets in the business. Each of these assets will, of course, occupy a separate page in the ledger, as will the liability account notes payable, and John Kern's capital account. Note the completeness of this explanation, as compared with the one recording Mr. Stone's investment.

ORIGINATION OF TRANSACTIONS AND PRIMARY DOCUMENTS: PURCHASING

In any business the purchasing of materials or merchandise is a most important duty, and quite frequently the work will be done by a purchasing agent. This man should be a specialist in buying, and, where a special department is in operation, all purchasing will have to follow a definite routine. We shall, therefore, first study some of the forms used in purchasing.

THE PURCHASE REQUISITION

In a well organized business all purchases originate with a purchase requisition. The form of requisition will vary with the type of business. It is a written request from one department of the business to the purchasing department, requesting it to purchase needed merchandise or supplies. For instance, if the office manager wishes to purchase a new desk or typewriter, he will fill out a purchase requisition form. This form, prepared usually in duplicate, will be a request for the purchasing agent to purchase. The original requisition goes to the purchasing department, while a copy remains with the department requesting the goods.

Form 24-8-10M 2-19

PURCHASING DEPT.

Please order the following goods:

Approved

Remarks

DEPT.

Order № 4789 *PER*

PURCHASE ORDER — ILLUSTRATED

FORM 24-7-30MB-4-40

ORIGINAL PURCHASE ORDER **No.** 7036

Johnson & Johnson
NEW BRUNSWICK, N.J., U.S.A.

W. C. NICHOLAS,
Director of Purchases
G. W. ACHENBACH,
Purchasing Agent

DATE

ORDER NUMBER MUST BE PLACED ON ALL INVOICES, SHIPPING PAPERS AND SHIPMENTS

RENDER ALL INVOICES IN DUPLICATE TO PURCHASING DEPARTMENT

TO

VOID

DELIVERY DATE

TERMS:

ROUTE:—

F.O.B.

QUANTITY	DESCRIPTION AND DELIVERY	PRICE
	VOID	
	VOID	

THIS ORDER SUBJECT TO ALL CONDITIONS SHOWN AT BACK
JOHNSON & JOHNSON WILL NOT BE RESPONSIBLE FOR MATERIAL SUPPLIED WITHOUT AN ORDER SIGNED BY
PURCHASING AGENT

PURCHASE ORDER

On receipt of the purchase requisition the purchasing department issues a purchase order which will be sent to the company from whom the goods are to be obtained. Each form has a good reason for its being. The purchase order form may be in use for several reasons. A formal written order leaves little doubt as to what is wanted, how it is to be shipped, and when it must arrive. A number is given which should be used by the shipper to identify the shipment on his invoice. The form opposite is intended to show how this information may be presented.

RECEIVING AND CHECKING

Another important function in the purchasing procedure of a well organized business is the proper receiving and checking of the merchandise purchased.

Many business organizations maintain special receiving departments, where all inward shipments are received. This department is supplied with a duplicate of all purchase orders and will check incoming goods and invoices against the purchase

RECEIVING FORMS ILLUSTRATED

RECEIVING DEPARTMENT

DATE	CONTAINERS	NUMBER	GROSS WEIGHT	QUANTITIES	DISPOSITION	REMARKS

RECEIVING CLERK

STOREROOM DEPARTMENT

DATE	QUANTITIES	NET WEIGHT	ITEMS (WHEN NECESSARY)	REMARKS

orders. They will examine and weigh or count the goods received, and stamp on the invoice which accompanies the shipment its report on these facts, noting any defects, shortage, or other diversion from what the purchase order calls for. Receiving and checking forms are illustrated on page 75.

THE SALES INVOICE

This is another very important business form used in every business. The bookkeeper or billing clerk lists on this form each article ordered by the customer. He usually prepares the invoice from the customer's purchase order, or from a salesman's order blank signed by the customer. The *Sales Invoice* is usually prepared in triplicate. One copy goes to the shipping department, where the order is filled. The shipping department returns the invoice with a notation that each item has been shipped; or, if any item is not in stock and cannot be shipped,

INVOICE ILLUSTRATED

FORM 53-3-35M-1-40

SURGICAL SEABURY·INC· DRESSINGS

NEW BRUNSWICK, N. J.

ACCT NO.

CL. TRADE

SALESMAN NO.

CUSTOMER'S ORDER NO.

REFER TO INVOICE NO.

REQUISITION NO.

INVOICE DATE

SOLD TO

SHIPPED TO AND DESTINATION

HOW SHIPPED DATE & ROUTE

TERMS: 1% 10 DAYS, NET 60 DAYS

FOR CUSTOMER'S USE ONLY

REGISTER NO

VOUCHER NO

F. O. B. CHECKED

TERMS APPROVED

PRICE APPROVED

CALCULATIONS CHECKED

TRANSPORTATION

FREIGHT BILL NO

AMOUNT

MATERIAL RECEIVED

19

DATE

SIGNATURE

TITLE

SATISFACTORY AND APPROVED

ADJUSTMENTS

ACCOUNTING DISTRIBUTION

AUDITED

FINAL APPROVAL

	DESCRIPTION	NET PRICE	EXTENSION
	"THE UNDERSIGNED GUARANTEES THAT NO ARTICLE BEARING ITS NAME AND COVERED BY THIS INVOICE IS ADULTERATED OR MISBRANDED WITHIN THE MEANING OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT, OR IS AN ARTICLE WHICH MAY NOT, UNDER THE PROVISIONS OF SECTIONS 404 OR 505 OF THE ACT, BE INTRODUCED INTO INTERSTATE COMMERCE THAT NO ARTICLE COVERED BY THIS INVOICE IS PRODUCED IN VIOLATION OF ANY PROVISION OF THE FAIR LABOR STANDARDS ACT OF 1938, AND THAT THE ADVERTISING CLAIMS, LABELS, AND CIRCULARS EMPLOYED BY IT DO NOT VIOLATE ANY PROVISION OF THE FEDERAL TRADE COMMISSION ACT, AS AMENDED SEABURY, INC. NEW BRUNSWICK, N. J.		

then that fact is indicated. The billing department may now send a correct invoice to the customer. Most retail stores simply use sales " slips " or " tickets " in place of the formal invoice. These sales slips help keep track of stock and act as a receipt for the customer. If the customer asks to have his purchase charged, a more formal invoice will be prepared from the sales slip and mailed to the customer.

The original invoice, as indicated on the preceding page, is sent to the purchaser. A copy will be the bookkeeper's authorization to record the sale in the journal, a debit to the customer and a credit to sales. The purchaser will use the invoice to " check " his purchase order, and will pass it on, if found correct, to his bookkeeping department for record and payment. On the books of the purchaser this invoice, properly approved, will be the authentication for his journal entry debiting purchases and crediting the company supplying the merchandise.

BILL

The term *bill* is used quite frequently to describe a document issued by a person for services rendered. The term is almost synonymous with the term *invoice,* in that it may designate a charge for goods as well as services. We speak of a doctor's bill, or the electric light bill, or the telephone bill, while the term *invoice* is used more correctly for a sale of merchandise. We may ask a wholesale dealer for a bill, but more correct terminology would be served by use of the term *invoice.* On the other hand, one would not think of asking a doctor to render an invoice. A careful use of terminology in accounting is a quality which the beginning student should cultivate early in his training.

STATEMENT

This term refers to a summarized statement of an account usually rendered periodically. Many organizations render monthly statements. These statements exhibit first the balance due at the beginning of the month; to this amount there are added the charges for the current month, and, at the same time, all payments and allowances, if any, are listed as deductions; and finally the statements exhibit the balance due as of the last day of the month.

STATEMENT ILLUSTRATED

MONTHLY STATEMENT

SEABURY·INC

NEW BRUNSWICK, N. J., U. S. A.

DATE ______________________

RETURN THIS STUB WITH YOUR REMITTANCE.
YOUR CANCELLED CHECK IS A VALID RECEIPT.

AMOUNT ENCLOSED $ ____________

DATE	REFERENCE	CHARGES	CREDITS	BALANCE
		PREVIOUS BALANCE		

SEABURY·INC

BL—Balance CR—Credit	DIS—Discount E/C—Error Corrected	F/E—Freight or Express MDS—Merchandise	THE LAST AMOUNT IN THIS COLUMN IS YOUR BALANCE

FORM 53 ALL REMITTANCES TO BE SENT TO MAIN OFFICE, NEW BRUNSWICK, N. J.
PAYABLE IN NEW YORK FUNDS.

A statement, as illustrated above, will often be a carbon copy of a self-balancing account, as kept by bookkeeping machine in the ledger. This statement is available immediately at the end of the month, and, by using "window" envelopes, a concern can get its statements out promptly with very little effort.

RECEIPTS

In order to collect an account in a court of law two important points must be proved by the seller. He must prove first the goods were ordered, and secondly that the goods were shipped

and that the customer being sued actually received them. The first point is easily complied with if a signed order is available, while the second link in the chain of evidence calls for a proper receipt. If a concern maintains its own delivery system, a receipt book should be kept, which will serve as satisfactory evidence that the goods have been delivered and received by the customer. This receipt may be drawn as a very simple form, or may take the form of a complete legal document, such as a bill of lading, illustrated herewith, used by common carriers. If the

Uniform Domestic Straight Bill of Lading Adopted by Carriers in Official, Southern and Western Classification Territories, March 15, 1922, as amended Aug. 1, 1930

FORM 19-23-15M-5-39 ⊖ (PRESCRIBED BY THE INTERSTATE COMMERCE COMMISSION)

UNIFORM STRAIGHT BILL OF LADING—ORIGINAL—NOT NEGOTIABLE

RECEIVED subject to the classifications and tariffs in effect on the date of issue of this Bill of Lading,

Shipper's No.

at New Brunswick, N. J., 19 Agent's No.________

....Company

the property described below, in apparent good order except as noted (contents and condition of contents of packages unknown) marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination if on its own road or its own water line otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law whether printed or written herein contained including the conditions on back hereof which are hereby agreed to by the shipper and accepted for himself and his assigns

(Mail or street address of consignee—For purposes of notification only)

Consigned to

Destination State of County of

Route Car Initial Car No.

Delivering Carrier

No Packages	DESCRIPTION OF ARTICLES SPECIAL MARKS and EXCEPTIONS	*WEIGHT (Subject to Corr.)	Class or Rate	Check Column	Subject to Section 7 of conditions if this shipment is to be delivered to the consignee without recourse on the consignor the consignor shall sign the following statement. The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. ________ (Signature of consignor)
	BANDAGES OR DRESSINGS, DENTISTS', PHYSICIANS' OR SURGEONS'				If charges are to be prepaid, write or stamp here, 'To be Prepaid'
					Received $________ to apply in prepayment of the charges on the property described hereon.
		This Shipment is correctly described. Correct Weight is________Lbs. Subject to Verification by the TRUNK LINE FREIGHT INSPECTION BUREAU According to agreement			Agent or Cashier. Per________ (The signature here acknowledges only the amount prepaid.)
					Charges Advanced. $________
	The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon and all other requirements of Rule 41 of the Consolidated Freight Classification	SHIPPER			Shipper's imprint in lieu of stamp not a part of Bill of Lading approved by the Interstate Commerce Commission.

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight

NOTE—Where the rate is dependent on value shippers are required to state specifically in writing the agreed or declared value of the property

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

________ per ________

Shippers, Per____

Permanent post office address of shippers, NEW BRUNSWICK, N. J. ________Agent, Per________

student is not familiar with this document his local railway freight agent will be glad to furnish him with a copy for his notes. The importance of keeping all original documents should be apparent.

PURCHASE AND SALES RETURNS AND ALLOWANCES

Two accounts which should be explained at this time are Purchase Returns and Sales Returns. Merchandise sometimes will

not meet the demands of the purchaser, or for some other reason will not be acceptable to him; and as the good-will of all customers is to be desired, firms usually will allow such merchandise to be returned. If the merchandise returned is in good order, it may be returned to stock for sale to other customers, and the Returned Sales account debited with the sales price of such merchandise. In this case there would be nothing lost, except handling costs. However, returned merchandise, usually having some defects, must be sold (if salable at all) at a considerable discount. In some instances the damages or defects are quite slight and the purchaser may be willing to keep the goods if an allowance in price is made. Sometimes a separate account is maintained for *Sales Allowances,* but quite frequently a general account termed *Sales Returns and Allowances* is run to handle both returns and allowances. There is no serious objection to this practice if the amount of each is relatively small; but, where the amounts are considerable, it will be of greater service to the management if separate accounts are kept.

The following journal entries will illustrate the handling of (*a*) sales returns, (*b*) sales allowances, (*c*) damages collected from express company, and (*d*) purchase returns.

(*a*) Suppose Customer X returns merchandise to us because he claims it is not as per sample.

Sales Returns	$20.00	
Customer X		$20.00
To record the receipt of merchandise returned by Mr. X — not per sample.		

(*b*) Now suppose merchandise shipped to Customer Y is damaged in transit and he does keep it, but requests an allowance, which we grant.

Sales Allowances	$20.00	
Customer Y		$20.00
To record allowance for damages by carrier.		

(*c*) Suppose the damage to the merchandise above is $15.00 at cost and the Express Company settles in full. This entry will be as follows:

Cash	$15.00	
Sales Allowances		$15.00
To record check received from the Express Co. for claim on merchandise shipped to Y.		

(*d*) Now suppose $50.00 worth of merchandise purchased from the Excelsior Manufacturing Company is imperfect because of the manufacturing process, and we return it to them. The entry will be:

Excelsior Mfg. Co.	$50.00	
Purchase Returns		$50.00
For defective merchandise returned.		

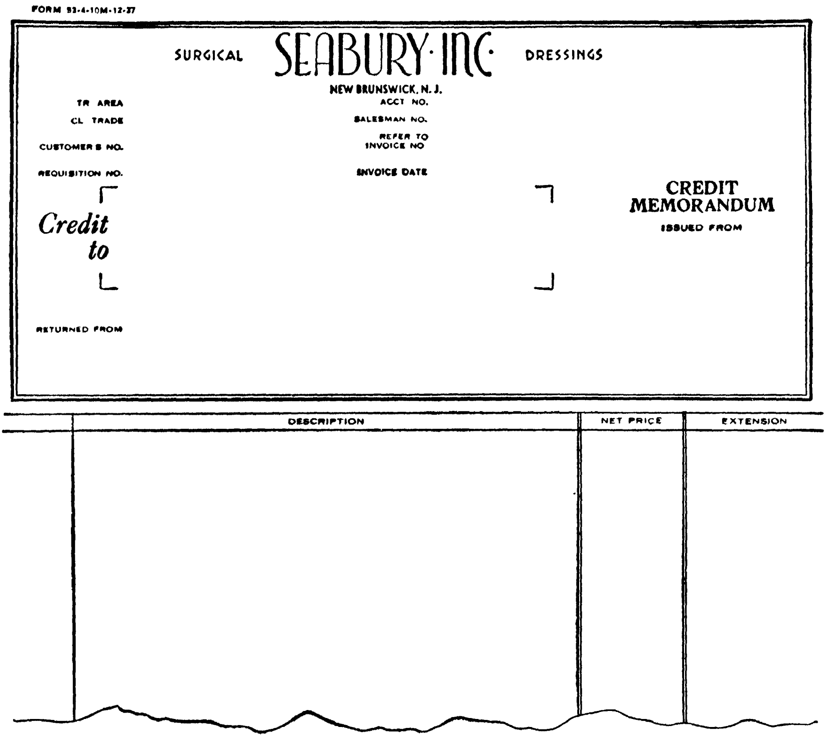
The effect of this transaction is to cut our liability to the Excelsior Manufacturing Company $50.00, the value of the merchandise returned, and also to set up an account which will offset the cost of Purchases.

The student should realize that purchase returns and sales returns are reciprocal accounts on two different sets of books. The customer returning merchandise will utilize the *Purchase Returns* account, while the vendor will record the same transaction in his *Sales Returns* account.

DEBIT AND CREDIT MEMORANDA

Many business organizations will have forms printed, as in the illustration below, to give recognition to acceptance of returned merchandise. These forms vary considerably, but a *Credit Memo,* sent by the vendor to allow for merchandise returned to him by the purchaser, usually contains information pertinent to the return, such as: Name of the Purchaser, Description of returned stock, and the Amount allowed. Often these credit memos will be numbered for reference. The term *credit memo* is used because it indicates that the customers' account has been credited on the books of the vendor. This memo, when received by the purchaser, will be utilized as the basis of a journal entry such as entry (*d*) above, while a copy of this same credit memo may be the basis of an entry such as (*a*) above, on the books of the vendor.

A debit memorandum or *Debit Memo,* as it is called, may be issued by either the buyer or seller. The seller may use it to


FORM 32-4-10M-12-37

SURGICAL SEABURY·INC· DRESSINGS

NEW BRUNSWICK, N. J.

TR AREA

CL TRADE

CUSTOMER'S NO.

REQUISITION NO.

ACCT NO.

SALESMAN NO.

REFER TO INVOICE NO

INVOICE DATE

Credit to

CREDIT MEMORANDUM

ISSUED FROM

RETURNED FROM

DESCRIPTION	NET PRICE	EXTENSION

notify the purchaser of a supplemental charge such as freight charges prepaid on behalf of the customer; or possibly to correct an invoice for an undercharge. The buyer, on the other hand, may use this instrument as a formal notification that goods have been returned for some reason, possibly because they were damaged in transit as in entry (D) above. In such a case the seller may acknowledge receipt of the returned goods and his acceptance of the *Debit Memo* by issuing in turn a *Credit Memo*.

The form is very similar to the *Credit Memo* illustrated above but is usually printed on a different colored paper.

CREDIT TERMS AND CASH DISCOUNTS

When merchandise is sold on credit, some terms of payment are made part of the agreement or contract; these terms are spoken of as *credit terms*. Sometimes a bill of goods will be sold "net thirty days." These terms indicate that the seller will

allow the purchaser thirty days to pay the bill, but no discount is offered for more prompt payment. A very widely used set of credit terms is 2/10, n/30. These terms permit the purchaser to deduct two per cent of the total amount if he will pay the bill within ten days, otherwise he must pay in thirty days. There are other credit terms, such as 1/10, n/60, where the seller offers only one per cent for prompt payment; and there are others in some lines of business where even three per cent is allowed for prompt payment and even longer periods are allowed for a smaller discount, such as 3/10, 2/30, n/60.

These terms offer three per cent for payment within the first ten days, but hold out two per cent for payment in the next following twenty days if the purchaser is not in position to avail himself of the higher discount.

These discounts may amount to a considerable saving because, even if an organization has not cash available immediately to avail itself of the two per cent discount for prompt payment, it will pay that organization to go to its bank and borrow the money at six per cent. The two per cent is for payment within ten days as against thirty days net, while the bank interest is six per cent per annum, so that $1000.00 borrowed for one year at a cost of $60.00 interest can be turned over twelve times and thus bring in cash discounts of $240.00.

TRADE DISCOUNTS

Cash discounts are not to be confused with trade discounts, which are usually much larger per cents and allowed as mark-offs from a wholesale price list to *bona fide* retailers or members of a trade. For instance, a furniture factory may publish a catalog with certain fixed prices which are much higher than the organization expects to receive from the retailer. A confidential price list is then published, mentioning a certain trade discount for each item in the catalog. A living room set may be priced in the catalog at $500.00, but in the discount list be subject to trade discount of 50 per cent. This purchase, when recorded on the retailer's book, would be entered as a $250.00 purchase and any discounts offered for prompt payment would be based on $250.00, the net amount.

CASH RECEIPTS

One very important phase of every business is the proper handling of cash and cash items. Cash items may be received from customers in several forms. Checks without a doubt make up the bulk of the receipts received through the mail, while currency makes up the bulk of over-the-counter receipts. Through the mail, in addition to checks, Postal and Express money orders are frequently received, and Western Union and Postal Telegraph money orders are also sometimes received.

In a retail business where the bulk of the receipts is currency from over-the-counter sales, control of cash through a good central cashier's department or by use of good cash registers is usually satisfactory. With a central cashier's department in operation, the sales clerks make out sales slips, showing the items sold, their unit price, and total amount of the sale. The slip also indicates the denomination of the bill presented. The sales slip and currency are then sent by automatic conveyor to one of the central cashiers, who verifies the calculations, receipts the bill and registers the receipt on his register, sending back by the same conveyor the receipted sales slip, together with change for the customer. A daily check of each clerk's slips, and an accumulated total of all clerk's slips, should equal the total of the central cashier's tape.

Receipts through the mail from customers should receive equally careful handling. In many organizations a mail teller opens all mail from customers and records on a *Cash Received* form all cash received through the mail. The form usually provides a space for the customer's name, description of the remittance, check, money order, etc., with a column for the amount. The remittances are fastened to the correspondence and placed in a mail basket and, together with the teller's report, are taken to the cashier who signs for the mail. The cashier then enters the receipts on his books, and the total, of course, must agree with the total from the mail teller's reports. Thus at least two people handle and verify cash received, making what is known in the business and accounting world as an internal check. Such an internal check on receipts will go a long way toward keeping down embezzlements.

Another very good rule to insist upon is that every cent of

cash received be deposited daily on the day received, if possible. In order that every cent received be deposited, it will be necessary to maintain change funds and a petty cash fund. A change fund is a fixed amount which each cashier or cash register keeps at all times for making change, and is never deposited. Some retailers keep fifteen to twenty-five dollars in such a fund, which is needed to make change in the morning before the day's receipts accumulate sufficiently to take care of change themselves.

Often, in order to deposit daily, cashiers will be authorized to end their business day at 2:30 P.M., when all cash received to this time is tabulated and deposited before the bank closes. All cash received after 2:30 will be recorded as of the following day and go into the next day's cash receipts.

In most large cities special night depositories are available for those who wish to deposit all money received and not risk keeping it over night. The night deposit facility of many banks consists of an especially designed metal receiving door which opens and forms a semi-circular metal receiving department, and which when shut turns, dropping the deposit into a chute leading to a safe deposit compartment within the bank. The night deposit boxes are usually locked and only those customers who have applied for their use are provided with keys.

CASH DISBURSEMENTS

Another most important rule which should be established requires that, as far as possible, all payments be made by check. A check endorsed by the party receiving payment is the best proof that an item in question has been paid. The use of a good voucher check is advised, because a brief statement made part of the check will show just what items are being paid by the check. Coupled with the voucher is usually a statement that acceptance and endorsement of the check constitute payment in full of the items listed.

PETTY CASH

With a rule in operation that all payments be made by check, it will be necessary to maintain a petty cash fund to take care

of those small items for which it might not be convenient to pay by check.

The best way to handle petty cash disbursements is to establish a petty cash fund, which should be placed in the hands of some clerk for management. The fund is established by drawing a check on the general cash fund to the order of *Petty Cash,* for an amount which it is estimated will take care of petty disbursements for a convenient period such as a week or a month. The check should then be cashed by the petty cashier, who will have charge of the fund. A second necessary step is to purchase *Petty Cash Voucher* pads from the stationer, similar to the form below:

PETTY CASH VOUCHER ILLUSTRATED

PETTY CASH VOUCHER

Date ________ Number ________

Received ________________________ DOLLARS

For ________________________________

Charged to ________________

Approved ________________

Signed ________________

Such a voucher should be made out for every petty disbursement and signed by the person receiving the money. The total of all paid vouchers when added to the cash on hand must always equal the total of the fund. Periodically the fund must be reimbursed by the bookkeeper or the cashier, who will audit the petty cash vouchers, classifying them by accounts to be charged and draw a reimbursing check for the total. The vouchers are his authority for the check drawn and are usually stapled together and filed away with a reference to the reimbursing check number.

JOURNAL SUMMARY ILLUSTRATION

As an aid in further impressing the process of journalizing, and that the student may see a journal as a unit, several selected

transactions are now presented and journalized exactly as they would be in actual practice.

Transactions to be Journalized

(1) A. Johnson wishes to enter the retail hardware business and deposits $3000.00 of his personal funds to the credit of his business account at the First National Bank.

(2) He purchases for cash the following items from the Brown Hardware Co. which is retiring from business.

(*a*) Shelving and store equipment $800.00
(*b*) A delivery truck valued at 600.00

(3) He purchases from the Metropolitan Hardware Co., a stock of merchandise costing $1640.00, terms 2/10 n/30.

(4) He purchases a further stock of merchandise from the Tomlin Hardware Co., $814.00, terms 2/10 n/30.

(5) He pays freight on the shipments above, $76.00.

(6) Some of the hardware received from the Metropolitan Hardware Co. is unsatisfactory, and upon his telephoning the company they ask him to return it for credit; cost price is $160.00.

(7) Cash sales for the day $110.00.

(8) In order to take care of Petty Purchases and payments, Mr. Johnson authorizes the establishment of a Petty Cash Fund of $50.00.

(9) In order to expand his business Mr. Johnson negotiates a loan from his bank for $1000.00 and gives his note payable in sixty days with interest at six per cent.

(10) He sells on account hardware to the following accounts: T. Jones Building Company, $246.00, terms 2/10 n/30; and Smith Construction Co., $219.50, terms 2/10 n/30.

(11) A credit memorandum arrives from the Metropolitan Hardware Co. (no entry; see trans. 6).

(12) He pays the Metropolitan Hardware Co. their account less the credit memorandum and the purchase discount.

(13) Mr. Johnson gives his check for $75.00 to the Local News for an advertisement.

(14) The Smith Construction Company returns three kegs of nails to us for credit, which we billed at $19.50. We allow the return and issue a credit memorandum.

(15) Mr. Smith of the Smith Construction Company gives us his check for $196.00 in full settlement of his account.

In the standard journal form which follows, transaction numbers are used instead of dates, and are written in the center of the line rather than in the regular space provided at the left. Dating entries in this manner is in accordance with modern practice and preferred by many practicing accountants, including the author. When this method of dating is used, the name of the month appears only once on the first at the top of a fresh

page, all subsequent dates are written simply as a number on the line between transactions.

Mr. A. Johnson General Journal

1				
Cash	3000	00		
A. Johnson Capital			3000	00
To record A. Johnson's investment in hardware business. Cash deposited to business account in First National Bank.				
2				
Store Equipment	800	00		
Delivery Truck	600	00		
Cash			1400	00
Purchased for cash from Brown Hardware Co., retiring from business.				
3				
Purchases	1640	00		
Metropolitan Hardware Co.			1640	00
Bought on account 2/10 n/30.				
4				
Purchases	814	00		
Tomlin Hardware Co.			814	00
On account 2/10 n/30				
5				
Freight & Cartage	76	00		
Cash			76	00
On Tomlin Hardware Co. shipment				
6				
Metropolitan Hardware Co.	160	00		
Purchase Returns			160	00
Mdse. unsatisfactory, returned as per telephoned instructions.				
7				
Cash	110	00		
Sales			110	00
Cash Sales for the day.				
8				
Petty Cash Fund	50	00		
Cash			50	00
To record establishment of petty cash fund.				
9				
Cash	1000	00		
Notes Payable			1000	00
Mr. Johnson borrows from the First National Bank on his 60-day Note at 6%.				
10				
F. Jones	246	00		
Sales			246	00
Terms 2/10 n/30				
11				
Smith Construction Co.	219	50		
Sales			219	50
Terms 2/10 n/30				

— 12 —		
Metropolitan Hardware Co.	1480 00	
Cash		1450 40
Purchase Discounts		29 60
To record payment of account in full. Total $1,640.00 less cr. memo 160 — $1,480.		
— 13 —		
Advertising	75 00	
Cash		75 00
Paid to *Home News*		
— 14 —		
Sales Returns	19 50	
Smith Construction Co.		19 50
For credit memo on three kegs of nails returned.		
— 15 —		
Cash	196 00	
Sales Discount	4 00	
Smith Construction Co.		200 00
Received check in full payment invoice of 11th less credit memo and 2% discount.		

QUESTIONS ON THE CHAPTER

1. What do you understand by "a book of original entry"?
2. Rule a two-column general journal and explain its use in recording transactions.
3. (*a*) Explain the process of posting from the general journal to the ledger. (*b*) What purpose is served by the folio columns in the journal and the ledger? Explain fully.
4. (*a*) How should a compound entry be written? (*b*) Explain the importance of a clear and adequate explanation for each journal entry.
5. What are some of the advantages to a company employing the services of a purchasing agent?
6. Rule and explain: (*a*) purchase requisition, (*b*) purchase order.
7. Explain the use of the sales invoice.
8. Differentiate between (*a*) sales invoice and bill, (*b*) invoice and statement. (*c*) How can an organization facilitate the work of getting out statements?
9. Explain the function of a modern receiving department.
10. Why is a receipt so valuable?
11. Why is the purchase order also valuable?
12. What are credit terms? Explain and illustrate fully.
13. It has been said that it is profitable to borrow money from the bank at six per cent in order to accept cash discounts of two per cent. Is this true? Would you advocate such a practice?
14. Explain the creation and the operation of a petty cash fund.
15. (*a*) What do you understand by "an internal check"?
    (*b*) Illustrate with cash receipts.

PROBLEM MATERIAL

Problem 1

Journalize the following selected transactions, post to ledger accounts, and take a trial balance:

1. John Price starts business with a cash investment of $3000.00.
2. He paid his first month's rent of $125.00 to the Realty Co.
3. He received a shipment of merchandise in amount of $1200.00 from the Big Town Supply Co., terms net 30 days.
4. He sells for cash $116.00 on his first day and also on account the following customers: D. Bradley $60.00, net 30 days; B. Marks $40.00, net 30 days; The Trenton Company $100.00, terms 2/10 n/30.
5. He paid the Middlesex Hauling Co. $12.00 on the Big Town shipment, and $6.00 to deliver the merchandise to the Trenton Company.
6. He establishes a petty cash fund in amount of $100.00.
7. He purchases a Chevrolet delivery truck — total cost $890.00 — for which he gives his check for $490.00 and signs finance notes for the balance.
8. He pays $65.00 cash to N. B. Insurance Co. on the delivery truck and $35.00 for a fire policy on his merchandise.
9. He purchases a new machine for his factory, $720.00 F.O.B. Dayton, Ohio, from the Dayton Machine Co., terms net 30 days.
10. He pays express charges and hauling on the machine above, $30.00.
11. He pays the N. B. Machine Co. $40.00 to install and test this machine.

Problem 2

Journalize the following selected transactions, post to ledger accounts, and take a trial balance:

1. John Davis starts business with the following investment: Cash deposited to his business account $3600.00, Equipment for his store valued at $1200.00, and a Delivery Truck valued at $600.00.
2. He rents a suitable store, paying $120.00 for one month.
3. He purchased $1600.00 worth of merchandise from the Metropolitan Supply Co., terms 2/10 n/30.
4. The Underwood Typewriter Co. sold Mr. Davis a new typewriter for $125.00, payable net in 30 days.
5. He sells merchandise, terms 2/10 n/30 to S. Smithers, total $240.00.
6. Mr. Davis borrowed $1000.00 from the Morton National Bank for six months, 6% interest to be paid at maturity.

7. He sells merchandise, terms 2/10 n/30 to T. Dragon, $300.00.
8. Mr. Davis receives a credit memo of $180.00 for merchandise returned to the Metropolitan Supply Co., not as per sample.
9. He purchased $1800.00 worth of merchandise from City Sales Inc., terms 2/10 n/30.
10. He received a check $235.20 from S. Smithers in full payment of his account.
11. Cash Sales to date amount to $118.00.
12. Paid salaries in total $125.00.
13. Mr. Davis arranges with the Metropolitan Supply Co. to accept his 30-day 6% note for $1000.00 and a check for $411.60 in full settlement of their account to date.

CHAPTER VII

NEGOTIABLE INSTRUMENTS AND BUSINESS PAPERS (concluded)

INTRODUCTION

Transactions involving the use of checks, notes, drafts, and acceptances are quite common in modern practice. The business man is glad to accept any of these negotiable instruments in settlement of a debt. The check is, of course, the most desirable and most frequently used instrument of the group. It is probably the most important negotiable instrument which circulates as cash, and more widely used than any other form of negotiable paper. The promissory note is another important negotiable instrument which the business man is glad to accept, when he cannot have a check. The note, under these circumstances, is particularly desirable for two good reasons. First, a note may be discounted at the bank and the proceeds had for immediate use. The bank charges a small fee for discounting the paper and collecting it at maturity. Another very important reason the business man should be glad to have a note, when a check is not forthcoming, is the fact that a note is in itself written evidence of the existence of a debt and the maker's willingness to pay. This latter reason is very important should it be necessary to sue the debtor for payment in a court of law.

The beginning student should have a good knowledge of all negotiable instruments, and while the place to study the law of negotiable instruments is in a commercial law course, which the accounting student should not fail to include in his course of study, the author feels that a few essential principles should be presented at this time.

THE UNIFORM NEGOTIABLE INSTRUMENTS LAW

Today throughout the United States we have a uniform negotiable instruments law. This law was drawn in order that the laws of each state pertaining to negotiable instruments might be uniform, and that there should be no longer conflict of laws in neighboring states. This act has now been adopted by every state in the union.

DEFINITION OF NEGOTIABLE INSTRUMENT

A negotiable instrument is one under which the rights are transferred by endorsement and delivery (order paper) or by delivery alone (bearer paper), vesting the legal title in the transferee. The term negotiable means transferable quality: the capacity to pass from one person to another. It is because of this quality that negotiable instruments are commonly used as a substitute for money.

NEGOTIABLE INSTRUMENTS DISTINGUISHED FROM OTHER CONTRACTS

A negotiable instrument is a written contract, but it differs from ordinary contracts in that its language must conform to the strict requirements of the Negotiable Instruments Law; also, this Law governs the rights and liabilities of parties to the instrument and the method of delivering and transferring it.

Negotiable instruments, unlike ordinary contracts, are subjected to special rules — the Negotiable Instruments Law — because of the important use of such instruments in the business world as a substitute for money.

To say that an instrument is non-negotiable does not mean that it is invalid. It may be a perfectly good contract, but if it is non-negotiable, it will not be governed by the Negotiable Instruments Law, nor will the holders of it have the privileges and advantages conferred by the act upon holders of negotiable instruments.

PROMISSORY NOTES AND BILLS OF EXCHANGE

Negotiable instruments are of two types, negotiable notes and bills of exchange. Their classification depends upon the particular language used and the number of parties necessary for the creation of the instrument.

DEFINITION OF NEGOTIABLE PROMISSORY NOTE

A negotiable promissory note, as defined by the Uniform Negotiable Instruments Act, is " an unconditional promise in writing made by one person to another, signed by the maker,

engaging to pay on demand or at a fixed or determinable future time, a sum certain in money to order, or to bearer."

DEFINITION OF BILL OF EXCHANGE

A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer.

The parties to a bill of exchange are the drawer, the drawee, and the payee. If the drawer accepts the bill, he is known as the acceptor.

Thus, a promissory note is a promise by one person to pay another, whereas a bill of exchange is an order by one person to another to pay a third person, the payee. However, if a bill of exchange is accepted by the drawee, his position is analogous to that of the maker of a promissory note.

Bills of exchange may be classified with respect to the situations in which they are used. The bill of exchange in most general use is the check. It is an order addressed to the bank-drawee by the depositor-drawer to pay the payee the sum indicated. It is a demand bill of exchange. A bank draft is a banker's check; that is, it is a check drawn by one bank on another bank, payable on demand.

SIGHT AND TIME DRAFTS

Bills of exchange called drafts are also classified as to time. Sight drafts are bills of exchange payable at sight. Time drafts are drafts payable at a future time, as thirty or sixty days after date of acceptance. There are other forms of bills of exchange such as the Trade Acceptance, but this instrument is of so much importance that it will be defined and illustrated later in the chapter. Let us now look at the language and words required in all negotiable instruments.

REQUIREMENTS FOR NEGOTIABLE INSTRUMENTS

From Section 1 of the Uniform Negotiable Instruments Law we learn that "an instrument to be negotiable must conform to the following requirements:

(1) It must be in writing and signed by the maker or drawer;

(2) Must contain an unconditional promise or order to pay a sum certain in money;

(3) Must be payable on demand or at a fixed or determinable future time;

(4) Must be payable to order or bearer; and,

(5) Where instrument is addressed to drawee, he must be named or otherwise indicated therein with reasonable certainty."

DEFINITION EXPLAINED AND ILLUSTRATED

(1) *Writing and Signature:* No particular form of writing or signature is required. The writing may be legal if made in pencil but for practical reasons banks will not ordinarily accept checks written or signed in pencil.

(2) *Promise or Order:* To be a negotiable promissory note, an instrument must contain a definite promise, and to be a negotiable bill of exchange an instrument must similarly contain a definite order. However, the word *promise* or *order* need not be used, provided the language imports a promise or order. For example, the words " I will pay " import a promise, but the words " I hope to pay " or " I owe you " do not, but simply acknowledge indebtedness. The words " I command you to pay " import an order, but not " I authorize you to pay," or " I request you to pay." Mere words of civility, such as " Please Pay " do not impair the force of an order.

(3) *Promise or Order Must Not Be Conditional:* Suppose I say " I promise to pay X $300.00 if he builds my porch." This would not constitute an unconditional promise, because X might not build my porch. Performance will not cure the defect because the negotiability of an instrument must be judged from its face.

(4) *Payable in Money:* An instrument to be negotiable must be payable in money. An instrument reading, " Thirty days after date I promise to deliver 1000 bushels of No. 1 northern wheat," while possibly a very valuable paper, would not be a negotiable instrument. However, if I say, " I promise to pay $800.00 or 1000 bushels of wheat at the election of the holder," such an instrument would be negotiable because such an election in favor of the holder promotes negotiability and marketability.

(5) *Sum Must be Certain:* If I say, " I promise to pay $30.00 or $40.00," such an instrument will not be negotiable because

it is not drawn for a definite sum. A sum is not uncertain, however, because it is to be paid (*a*) with interest; (*b*) by stated installments; (*c*) with costs or attorneys' fees in case of default. Provisions of this sort also aid in the marketability of the instrument.

(6) *Payable on Demand or at a Fixed or Determinable Future Date:* " Thirty days after you marry my daughter " would not be negotiable, because the event might never take place, whereas " Thirty days after the death of your grandmother " would be satisfactory because death is certain.

(7) *Payable to Order or Bearer:* An instrument to be valid within the meaning of the act must be drawn either to order or to bearer. These are the important words of negotiability, and, unless they are present, an instrument otherwise valid may not be negotiable. Instruments drawn to " cash " or " payroll " or other nonexistent persons have also been held to be negotiable.

OTHER IMPORTANT FACTS REGARDING NEGOTIABLE INSTRUMENTS

The fact that an instrument is not dated does not affect its negotiability, nor will the antedating or postdating of the instrument. The holder of an incomplete instrument has *prima-facie* authority to insert the date.

When the sum is expressed in words and figures, the words govern. Interest, if provided for, runs from the date of issue if no date is stated. The words " value received " are not required, but because of custom most printed notes do contain these words. These are the most important points to look for if a person is unfamiliar with notes. If any of them are missing, the business man will do well to refuse the instrument unless completed to his entire satisfaction.

NOTE ILLUSTRATED

$ 100.00 New Brunswick, N. J., Aug. 1. 19---
Sixty days after date I promise to pay
To the Order of John H. Brown
One hundred and 00/100 - - - - - - - - - - - - - - - - - - DOLLARS.
Payable at The National Bank of N. J.
Value Received with interest at 6%
No. 45 Peter Kelly

The negotiable promissory note may be drawn in any form which conforms to the definition of a negotiable instrument just discussed. The form presented is an ordinary stock form.

SOME TERMS USED WITH NOTES

Maker: The party who makes the note. In the foregoing illustration, Peter Kelly.
Payee: The party in whose favor the note is made. John H. Brown above.
Date: The date written on the instrument. In the illustration August first.
Term: The number of days, months or years the instrument has to run. In the illustration " sixty days."
Date of maturity: Date + Term = Date of Maturity. In the illustration Aug. 1 + 60 days = September 30.
Face, or Principal Sum: The amount for which the note is drawn. \$100.00 in the illustration above.
Rate: The interest rate. In the illustration, six per cent.
Interest: Principal $\times$ Rate $\times$ term. In our illustration \$100.00 $\times$ .06 $\times$ 60/360 = \$1.00.
Maturity Value: Face + interest = maturity value. In the illustration \$100.00 + \$1.00 = \$101.00.
Date of Discount: The day on which the instrument is discounted.
Discount Period: The number of days from the date of discount to the maturity date. Suppose, in the illustration above, Mr. Brown discounts the note August 13. The discount period would be 48 days.
Discount: The charge made by party discounting, usually a bank, at the highest legal rate, which in most states is 6%. Calculated on the maturity value of the note. In our illustration: \$101.00 for 48 days at 6% = \$.71. Most banks, however, have a minimum charge for such service, some fifty cents, others one dollar.
Proceeds: Maturity value less the discount. In our case \$101.00 — \$.71 or \$100.29, except of course where a minimum charge of a greater amount may be in effect.

ENDORSEMENTS

A negotiable instrument may be transferred by the holder endorsing the instrument. This endorsement may take any of several forms.

1. *Endorsement in Blank:* This is the simplest endorsement form. The payee simply writes his name on the back of the instrument exactly as it appeared on the face. This will transfer legal title to the paper to the holder, and legally makes the instrument a bearer instrument, and may be negotiated further simply by delivery.

2. *Endorsement in Full* or *Special Endorsement:* This endorsement is to be preferred to the blank endorsement, because it designates the new owner's name, as

Pay to the Order of Henry James
Peter Kelly

Such an endorsement makes the instrument payable to the person you wish to receive payment and no one else. His endorsement (which he must make before he can be paid) will constitute a good receipt.

3. *Restrictive Endorsement:* This endorsement is one which in some way restricts further negotiation of the instrument, as

Pay to the order of
The National Bank of New Jersey
for deposit to the account of
Peter Kelly

This endorsement is strongly recommended as an endorsement for all checks to be deposited to the credit of the holder. The check or other instrument can then be used only as indicated in the endorsement, and obviously if lost cannot be further negotiated.

4. *Qualified Endorsement:* This endorsement qualifies or limits the liability of the endorser, and may be used under certain circumstances. The following is a qualified endorsement:

Pay to the order of
The National Bank of New Jersey
without recourse to me
Peter Kelly, Receiver

The trouble with such an endorsement is that the bank would not accept it from every holder, because the holder is, in fact, trying to release himself from a very important warranty which every other endorser gives — the warranty of payment to be described presently. A qualified endorsement is usual for someone named on the instrument, who is passing title, but is not personally benefiting by so doing, as, for example, an executor of an estate. Suppose a check comes in for a debt due the estate and made payable to Peter Kelly, Executor. Peter Kelly then, wishing to deposit the check to the credit of the estate's account, would have a right to use the endorsement without recourse. All Receivers in Bankruptcy protect themselves from personal liability by such an endorsement. But the business man receiving full value for the endorsement most certainly cannot avail himself of this endorsement.

ENDORSER'S WARRANTIES

The qualified endorser above warrants:

(1) The instrument is genuine and in all respects what it purports to be on its face.

(2) That he has good title to it.

(3) That all prior parties had capacity to contract.

(4) He has no knowledge of any fact impairing the validity of the instrument or rendering it valueless.

A transferor by delivery (but without endorsement) gives the same warranties as the qualified endorser.

In addition to these warranties all unqualified endorsers give this most important warranty. They agree that (1) if the instrument is duly presented, and (2) dishonored, and (3) if due notice of the dishonor is given, then he (the endorser) will pay the holder, or any subsequent endorser compelled to pay it.

This latter warranty, familiarly known as the warranty of payment, is of a great deal of importance to the business man. As seen above, endorsers for value cannot avoid this warranty. It simply means that you guarantee the instrument for its full value. But many small business men and other individuals often, without fully realizing what they are doing, will give an accommodation endorsement to a friend, so that the friend may borrow at the bank. In so doing the friend is working on the

endorser's credit and the endorser is contingently liable for full payment of the instrument if the maker fails to pay. Beginning students cannot be warned too early in their business careers nor warned too strongly about giving accommodation endorsements without considerable thought. Just as soon as a person signs as accommodation endorser, his name appears on the bank's liability ledger; and not only is the accommodation endorser now contingently liable, but his own credit limit is reduced accordingly.

CALCULATING INTEREST AND DISCOUNT

(*a*) *The Time Factor:* Interest and discount are expressed in terms of an annual rate, but the rate is calculated on the time the principal is used. It is therefore important to understand, first, how the interest or discount period is calculated. If a note is drawn for a period of months, the maturity date falls on the same day of the future month. A three-month note dated May 15 would mature August 15, and one dated January 31 for the same period would fall due April 30. If the note is drawn for a specified number of days, then the exact number of days must be added to the date of the instrument in order to find the maturity date. For instance, a note dated February 10 for thirty days, would fall due March 12.

(*b*) *Computation of Interest and Discount:* Banks and commercial organizations calculate interest on the basis of a 360-day year, rather than the 365-day year used by the government.

The standard formula for calculating interest or discount is: Principal × Rate × Time = Interest. For example, calculate the interest on a $1000.00 note for sixty days at 6%.

$$\$1000. \times .06 \times \frac{60}{360} = \$10.00$$

There are, however, several short-cut methods of obtaining the same result. Probably the best and most widely used method is the *Banker's Sixty-Day Method.* This method is calculated on the 360-day year, and since 60 days is one-sixth of the year, then at 6% the interest for 60 days is 1% of the principal. From this fact we observe that to find the interest on any sum for 60 days at 6% you simply point off two places

to the left of the decimal point in the principal; and similarly for 6 days point off three places, because 6 is one-tenth of 60.

Applying the rule:

What is the interest on $1000. for 78 days at 6%.

First break up the number of days into multiples of six, as

60 days	point off 2 places	$10.00
6 days	point off 3 places	1.00
6 days	point off 3 places	1.00
6 days	point off 3 places	1.00
78 days		$13.00

For 42 days on $1000. at 6%.

30 days point off 2 places and divide by 2	$5.00
6 days point off 3 places	1.00
6 days point off 3 places	1.00
42 days	$7.00

Or, since 42 is exactly 7 × 6, point off 3 places and multiply by 7 to obtain the same result.

For 72 days on $1348.50 at 6%.

60 days	$13.485
6 days	1.3485
6 days	1.3485
72 days	$16.1820 or $16.18.

In order to get the correct result in using this method, observe in the case above that rounding off decimals must be postponed until the final result is obtained; otherwise, it is possible that an inaccuracy of one cent or more may be made; for instance, suppose in the case above we rounded off as follows:

60 days	$13.49
6 days	1.35
6 days	1.35
72 days	$16.19

ACCOUNTING FOR NOTES

Receipt of Note from a Customer

Suppose Mr. Brown buys $500.00 worth of merchandise from us on account, and when payment is due gives us his non-interest-bearing promissory note for the amount due.

The journal entries to express these facts would be as follows:

April 1	J. Brown	$ 500.00	
	Sales		$ 500.00
	To record sale, 30 days' credit		
May 1	Notes Receivable	500.00	
	J. Brown		500.00
	To record receipt of Brown's 60-day non-interest-bearing note.		

The entry April 1 records the sale to Brown, resulting in Brown becoming one of the accounts receivable of the business. May 1, instead of paying cash, Brown gives his non-interest-bearing note, which is accepted. The second entry records this transaction. In the first transaction John Brown owed us $500.00 on open account, while after the second transaction he owes us $500.00 on a promissory note. The receipt of the promissory note cancels his liability to us on the book account, and is a wise substitution of security which we hold.

Note Given to Creditor

The opposite situation is illustrated when we tender our note to one of our creditors in payment of our account.

April 1	Purchases	$1000.00	
	N. Y. Wholesale Co.		$1000.00
	To record purchase on 30 days' credit.		
May 1	N. Y. Wholesale Co.	1000.00	
	Notes Payable		1000.00
	To record payment of account to N. Y. Wholesale Co. with our 60-day non-interest-bearing note.		

In this instance we purchased from the N. Y. Wholesale Co., on account, and when the bill was due we gave our 60-day note in payment. The April 1 entry records the purchase and setting up our liability to the N. Y. Wholesale Co. The May 1 entry illustrates the exchange of liability, from Accounts Payable to Notes Payable.

Interest As a Factor

When interest is added to the face of a note, it becomes to the party receiving the note interest earned; to the party giving the note, the addition of interest increases the cost to him, in the

form of *Interest Expense.* The interest is not payable until maturity, so it is not a factor altering the journal entry when the note is received. The explanation in the journal, however, should make note of the interest. When the note is paid or discounted, however, the interest factor will be reflected in the journal entry.

Interest-bearing Note Paid by Customer at Maturity

Suppose that Brown's note for 60 days to us did carry six per cent interest, and that we held the note to maturity. On June 30, the note is due, and suppose we receive a check from Brown for $505.00. Five hundred dollars is the principal and $5.00 the interest earned. This transaction would be recorded as follows:

June 30	Cash	$ 505.00	
	Notes Receivable		$ 500.00
	Interest Earned		5.00
	To record payment received on Brown's 60-day note due today.		

Interest-bearing Note Paid to Creditor at Maturity

On the other hand, let us suppose that the note we gave the N. Y. Wholesale Co. was an interest-bearing note. Then the following journal entry will result:

June 30	Notes Payable	$1000.00	
	Interest Expense	10.00	
	Cash		$1010.00
	To record payment of our note to N. Y. Wholesale Co., plus interest.		

Customer's Non-interest-bearing Note Discounted

Suppose now that instead of holding Brown's non-interest-bearing note we discount it immediately at the bank. The bank will pay us $500.00, less the discount of six per cent. This will result in the following journal entry:

May 1	Cash	$ 495.00	
	Interest Expense	5.00	
	Notes Receivable Discounted ..		$ 500.00
	To record the discount of Brown's 60-day non-interest-bearing note received this day.		

When a note is discounted as just illustrated, the business receives the face of the note less the discount (usually six per cent). The bank holds the note to maturity and collects the face amount of $500.00.

Contingent Liability for Notes Receivable Discounted

Observe in the last journal entry that, when the note was discounted at the bank, instead of crediting the Notes Receivable Account as might have been done, the credit has been written to Notes Receivable Discounted, an altogether different account. This account represents a contingent liability which should be recorded on the books, because when a note is discounted the bank requires an endorsement from the party receiving the proceeds. The endorser of a note or other negotiable instrument, as was stated before, guarantees payment of the note should the maker fail to pay at maturity; and he, the endorser, receives due notice of such failure. For this reason the contingent liability account should be set up and remain on the books until the note is paid by the maker. The endorser will be very promptly advised in form of a protest of any failure on the part of the maker.

Cancellation of Contingent Liability When Customer Pays Note

If twenty-four hours elapse after the due date and no protest is received, then the endorser's liability should be canceled as is shown by the following entry.

July 2	Notes Receivable Discounted	$ 500.00	
	Notes Receivable		$ 500.00
	To cancel the contingent liability on Brown's 60-day note due July 1.		

Renewing Notes

When a note matures, it should be paid in full by the maker; but often the holder will agree to renew the note or take part payment and a new note for the balance. In either case the old note should be canceled, and a new note drawn. A journal entry such as one of the following will be satisfactory:

(*a*) Renewal with cash for interest only.

Notes Receivable	$ 100.00	
Cash	1.00	
Notes Receivable		$ 100.00
Interest Earned		1.00
John Smith gives us his 60-day note and check for $1.00 to take up his note due today with interest.		

(*b*) Renewal with cash for interest and partial payment.

Notes Receivable	$ 75.00	
Cash	26.00	
Notes Receivable		$ 100.00
Interest Earned		1.00
John Smith gives us his 60-day note for $75.00 and his check for $26.00 — a $25.00 reduction on the note and $1.00 interest.		

Dishonored and Protested Notes

If a negotiable instrument is not paid at maturity, it is said to be dishonored, and in order to hold the endorsers it should be protested. Protesting a note is usually done by a notary public, who makes demand for payment on the maker and, if payment is refused, ascertains the reason. He then writes a formal notice of these facts on a protest form and a copy of this form should be sent to every endorser informing them of the dishonored instrument and that the holder shall look to them for payment. If a customer has given you a note and refused to pay it at maturity, then his account should be charged with the maturity value of the note plus protest charges.

Suppose John Smith refused payment of his 60-day, 6% note for $100.00 and your bank, acting as your agent, protested the note, charging it against your account as follows: Note, $100.00, Interest, $1.00, Protest Fees, $2.40. The following entry should be written:

John Smith	$ 103.40	
Cash		$ 103.40
To record note of John Smith protested today and charged to our account at National Bank of N. J. as follows: Note, $100.00, Interest, $1.00, Protest Fees, $2.40.		

DISCOUNTING INTEREST-BEARING NOTE

If Brown's note to us were interest-bearing, a slightly different result would have to be recorded should we discount the note at the bank. The note, being interest-bearing, would make it worth at maturity the face plus six per cent, or $505.00.

The bank discounts a note on its maturity value, therefore the bank will take sixty days' discount on $505.00 or $5.05. The proceeds would be $499.95 and the transaction recorded as follows:

May 1	Cash	$ 499.95	
	Interest Expense	.05	
	Notes Receivable Discounted ..		$ 500.00
	To record the discount of Brown's 60-day six per cent note received this day, proceeds $499.95.		

It will be apparent that the discount expense is the interest cost on the number of days the bank must hold the note to maturity, deducted from the maturity value of the note. If the party receiving a note holds it any part of the term of the note, then the discount will be reduced, and as the maturity approaches the discount will be offset by the interest earned. This would be apparent if the business held the note 30 days and then took it to the bank for discount. The bank would pay $502.47 for the note and the journal entry would then record $2.47 as interest earned as follows:

May 31	Cash	$ 502.47	
	Notes Receivable Discounted ..		$ 500.00
	Interest Earned		2.47
	To record the discounting of Brown's 60-day note dated May 1.		

FURTHER USE OF INTEREST EXPENSE ACCOUNT

Another use made of the *Interest Expense* account is to record discount when money is borrowed from the bank on the proprietor's own personal note. When this is done, the bank usually takes out the interest in advance. This is known as *discount* and the amount deducted may be charged to the *Interest Expense* account.

Cash	$1980.00	
Interest Expense	20.00	
Notes Payable		$2000.00
Mr. Brown (proprietor) borrows $2000.00, less the bank discount, from the National Bank of N. J. Note is payable in sixty days.		

FURTHER USE OF INTEREST EARNED ACCOUNT

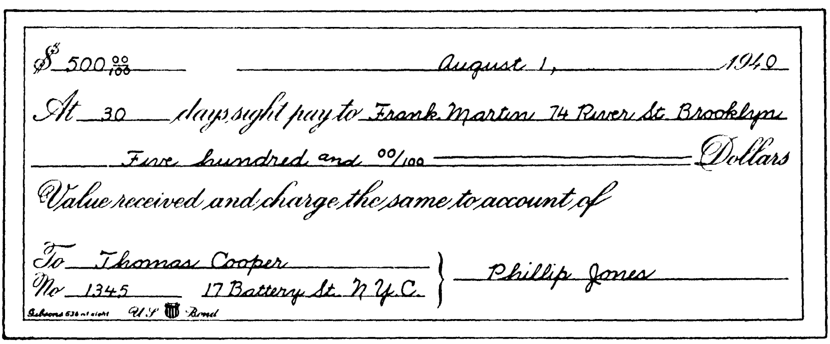
Interest received on bank balances, or from investments owned, may be credited to this earning account. If the income from investments is of considerable amount, then a separate account or accounts may be operated, such as *Income from Investments,* or *Income from Bonds.*

BILLS OF EXCHANGE

Definition. — A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, and requiring the person to whom it is addressed to pay on demand or at fixed or determinable future time a sum certain in money, to order or bearer.

Included among bills of exchange are such instruments as checks, including cashier's checks, drafts, both sight and time, trade acceptances, and banker's acceptances.

DRAFT ILLUSTRATED


$500 00/100 August 1, 1940
At 30 days sight pay to Frank Martin 74 River St. Brooklyn
Five hundred and 00/100 Dollars
Value received and charge the same to account of
To Thomas Cooper
No 1345 17 Battery St. N.Y.C. Phillip Jones

PARTIES TO A BILL OF EXCHANGE

(1) The *Drawer,* in foregoing illustration Jones.
(2) The *Drawee,* in foregoing illustration Cooper.
(3) The *Payee,* in foregoing illustration Martin.

If the drawee accepts the bill, he will then be known as the *Acceptor*, and bill will be payable in thirty days after acceptance. A sight draft is " accepted " by giving a check immediately.

NOTE AND BILL OF EXCHANGE DIFFERENTIATED

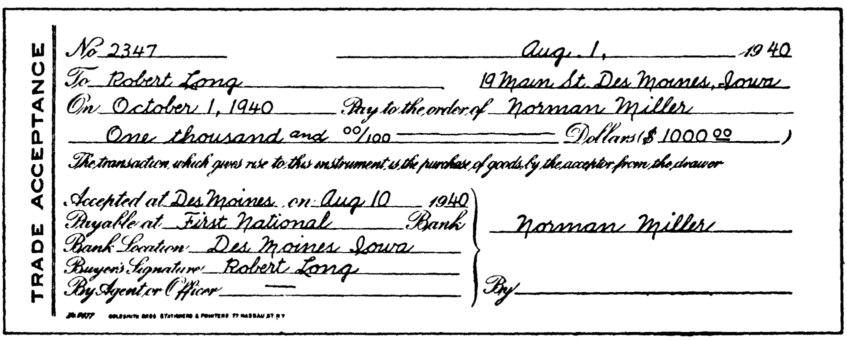
A promissory note is a promise by one person to pay another, whereas a bill of exchange is an order by one person, the drawer, to another, the drawee, to pay a third person, the payee. However, if a bill of exchange is accepted by the drawee, his position is analogous to that of the maker of a note. The drawee accepts a bill of exchange by writing across the face of the bill as follows " Accepted, New York, August 3, 19—. Thomas Cooper." A check which has been accepted by the drawee bank is known as a certified check.

A sight draft is a draft payable at sight; that is, on presentment to the drawee.

TRADE ACCEPTANCE

This is a special form of bill of exchange. It was first introduced by the Federal Reserve Act in 1914. It may be used for current *bona fide* business transactions only, as we may observe from the illustration below where a statement to this effect is written on the face of the instrument. For this reason trade acceptances are very desirable credit instruments, and ordinarily may be discounted at any National Bank.

TRADE ACCEPTANCE ILLUSTRATED



TRADE ACCEPTANCE

No 2347 Aug. 1, 1940

To Robert Long 19 Main St. Des Moines, Iowa

On October 1, 1940 Pay to the order of Norman Miller

One thousand and 00/100 Dollars ($1000.00)

The transaction which gives rise to this instrument is the purchase of goods by the acceptor from the drawer

Accepted at Des Moines on Aug 10 1940

Payable at First National Bank

Bank Location Des Moines Iowa

Buyer's Signature Robert Long

By Agent or Officer —

Norman Miller

By

Trade acceptances are superior credit instruments and looked upon with favor by the bankers because (1) they may be issued only for a current business transaction, involving the transfer of goods from the seller to the buyer; (2) they are therefore self-liquidating; (3) they are short-term and not renewable; and (4) they are re-discountable by Federal Reserve Banks.

QUESTIONS ON THE CHAPTER

1. What is the Uniform Negotiable Instruments Law?
2. (*a*) Define a negotiable instrument.
   (*b*) Explain five parts of the definition.
3. Name four negotiable instruments.
4. Define trade acceptance.
5. List and explain ten terms used with notes.
6. List and explain four different forms of endorsement.
7. Which endorsement would you recommend for depositing checks?
8. What do you understand by the endorser's warranty? Explain fully.
9. Explain the function of *Interest Expense* and *Interest Earned* accounts.
10. Explain the function of *Notes Receivable Discounted* account.
11. What is Protest?
12. What disposition should a bookkeeper make of a customer's note protested by the bank and charged against your account by the bank including interest and protest fees?
13. Why should the business man be glad to accept a note if his customer cannot pay cash when an account is due?

PROBLEM MATERIAL

Problem 1

November 1, 1940.

T. Wentworth, who has been in business before, is re-opening and asks you to work for him as clerk and bookkeeper. He informs you that in addition to $4200.00 with which he is opening a business account he has the following equipment: Auto Truck valued at $350.00; Store Equipment valued at $800.00, and some Office Equipment, the total value of which is $200.00. Write an opening entry for this investment and record the following transactions for the month of November:

November 4.

Paid one month's rent $125.00. Received Invoices and Shipment from Newport Distributors Inc. $1145.00, terms 2/10 n/30; Knight Manufacturing Co. $1760.00, terms 2/10 n/30. The goods are checked in and all found to be satisfactory. Purchased from MacFarland Importing Co. $820.60, terms 2/10 n/30.

November 5.

Mr. Wentworth has shelves and counters built for his store. He pays out $294.00 for lumber, $26.00 for hardware and paint, and $100.00 for the labor.

November 11.

Mr. Wentworth purchases a new cash register for his store which costs him $300.00 and for which he gives a check for $90.00 and signs finance notes for the balance.

November 12.

Stationery and other printed business forms arrive $28.00 for which a check is drawn. Gave MacFarland Importing Co. $804.19 a/c in full.

November 13.

He pays $140.00 for an advertisement in the *Local News*, announcing the opening of his store. He pays $12.00 for cleaning the store preparatory to opening. Gave Newport Dist. Co. $1122.10 account in full.

November 14.

The store opens for business and Cash Sales amount to $210.40. He pays $36.00 for three tons of coal. He sold to Solomon Brothers a total of $240.00, terms 2/10 n/30.

November 15.

Cash Sales for the day were in total $110.60. Drew a check for $9.00 to be cashed at bank to buy postage stamps. Sold on account to K. Williams $414.00, terms 2/10 n/30.

November 16.

A shipment of merchandise arrived from MacFarland Importing Co. with invoice for $240.00, terms 2/10 n/30. Cash Sales for the day were $185.00. Sold to B. Fuller $189.00, terms 2/10 n/30.

November 18.

Paid Salaries for the first half of the month total $240.00. Cash Sales for the day were $142.75.

November 19.

The Local National Bank has granted Mr. Wentworth a loan, accepts his 60-day note for $1000.00, crediting his account with $990.00. Cash Sales for the day were $152.40.

November 20.

Received a check from Solomon Brothers for $235.20 full payment of invoice of Nov. 14. Cash Sales for the day were $114.00. Sold to Solomon Brothers $320.00, terms 2/10 n/30.

November 21.

Gave our 60-day note for $1760.00 to the Knight Mfg. Co. Sold to B. MacDonald $410.00, terms 2/10 n/30. Cash Sales for the day were $98.00.

November 22.

Received an invoice and shipment from the Newport Distributors total $1326.40, terms 2/10 n/30. Sold to K. Williams $229.00, terms 2/10 n/30. Sold on same terms to B. Fuller $214.00. Received an invoice and shipment from the Knight Mfg. Co. total $1320.80, terms 2/10 n/30. The Cash Sales for the day were $78.00.

November 25.

Received a check $405.72 from K. Williams full settlement invoice of Nov. 15. Received an invoice and shipment from the MacFarland Importing Co. total $415.00, terms 2/10 n/30. Cash Sales for the day were $112.40.

November 26.

Received a check $185.22 from B. Fuller full payment invoice of Nov. 16. Cash Sales for the day were $98.75.

November 27.

Sold to Solomon Brothers $190.00, terms 2/10 n/30. Cash Sales for the day were $110.15. Purchases three new filing cabinets for the office $180.00 from the Globe Office Equipment Co. terms 30 days net. Gave a check $122.40 to *Local News* for our advertisements to date.

November 28.

Received a check from B. MacDonald $410.80 full settlement invoice of Nov. 21. We accept a $320.00 60-day 6% note from Solomon Brothers dated Nov. 28. The note is immediately discounted at the local bank and our account is credited with the proceeds. The Cash Sales for the day were $119.40.

November 29.

Sold to B. Fuller $326.00, terms 2/10 n/30 and to B. MacDonald $820.00 on the same credit terms. The Cash Sales for the day were $124.60. Paid Salaries to date $240.00.

Required:

(1) Journal entries.
(2) Post to ledger accounts.
(3) Trial balance of the ledger.

PROBLEM 2

November 1.

J. B. Wells purchases the following assets from Mr. T. Sanders, with which he intends to start business. Land and Buildings at depreciated values $4500.00 and against which there is a $2500.00 mortgage which Mr. Wells assumes; there are two trucks, one almost new valued at $1500.00 and another old truck

valued at $300.00; office equipment at depreciated values $600.00. Mr. Wells engages you to operate a simple two-column general journal and a standard double entry ledger. He instructs you to set up the assets acquired, and the liability assumed, crediting him with his net capital investment. He also informs you that as of this date he has deposited $2100.00 to his business account with the City National Bank.

November 2.

Mr. Wells instructs you to pay the current tax bill in amount of $200.00. A shipment of goods together with an invoice arrives from the General Wholesale Co. $1800.00; terms are 2/10 n/30.

November 4.

Mr. Wells purchases a new truck from the Grand Auto Company, for $1500.00; they accept the old truck at its book value $300.00, a check for $700.00 and finance notes for the balance.

November 5.

Mr. Wells purchases two spare tires at wholesale from a friend, paying $40.00 cash; they are for the new truck just acquired.

Mr. Wells has John Arnold insure his trucks against fire, theft, and public liability, for which Arnold bills Wells $80.00 to be paid within 30 days.

November 6.

Mr. Wells signs for a new machine which has just arrived from the Troy Machine Co.; the accompanying invoice is $310.00, terms 2/15 n/30. Mr. Wells authorizes you to draw a check for $42.00 express charges on this machine. A shipment of merchandise and invoice arrive from Thomas Brothers Inc. total $1400.00, terms 2/10 n/30.

November 7.

A shipment of merchandise and invoice arrive from Shultz Distributors Inc., total $1150.00, terms 2/10 n/30. Mr. Wells sells to Thomas Slater $510.00, terms 2/10 n/30.

November 8.

Mr. Wells sold to Alex Kohl $240.00, terms 2/10 n/30, and to Henry Martin on the same terms $375.00.

November 9.

Some of the merchandise received from the Shultz Distributors Inc. was damaged and returned, for which you have received a credit memo $50.00. Gave a check for $50.00 to finance company to pay the first payment on the new truck.

November 11.

Alex Kohl asks Mr. Wells if he will accept a 60-day non-interest-bearing note for $240.00 in payment of his account. Mr. Wells agrees and a note is drawn, dated November 11. Mr. Wells instructs you to take the Kohl note to the bank for discount. He endorses it and the bank credits his account with the proceeds.

November 12.

Mr. Wells asks you to draw a check for \$180.00 to the *Home News* Inc., your advertising for the week. Mr. Wells had arranged with the National Bank to discount his 60-day note for \$1800.00; the bank informs you that they have granted the loan and credited Mr. Wells' account with the proceeds.

The General Wholesale Company asks Mr. Wells if he will help them out by giving them a note for the \$1800.00 he owes them, so that they may get funds immediately from their bank. Mr. Wells agrees and issues a 60-day non-interest-bearing note for \$1800.00.

November 13.

A check for \$367.50 arrives from Henry Martin marked *full payment invoice Nov. 8.* A shipment of merchandise arrives with an invoice from the General Wholesale Co. \$410.00, terms 2/10 n/30. Mr. Wells instructs you to pay Thomas Brothers their account in full less any discount due him.

November 14.

Sales were made on the usual terms to Thomas Slater \$404.00, and Alex Kohl \$305.00. Received two new filing cabinets for the office, together with a \$75.00 invoice from the General Wholesale Co., terms 2/10 n/30.

November 15.

A check for \$499.80 arrived in the morning's mail full payment of Nov. 7 invoice to Thomas Slater. A check is drawn to the Standard Service Station for gas and oil used in trucks to date \$40.00.

November 16.

Our bank returns Thomas Slater's check \$499.80 marked insufficient funds, together with a protest fee of \$2.60, and notifying that they have charged our account \$502.40. A check for \$200.00 is drawn to pay salaries to date. A check for \$575.00 is drawn to the Bankers Trust Co. who hold the mortgage; the check represents \$75.00, the semi-annual interest and a \$500.00 reduction of the principal. Mr. Wells calls Mr. Slater on the phone regarding the protested check, and Mr. Slater promises to replace it with a certified check for the full amount.

November 18.

The morning mail brings a certified check for \$502.40 from Mr. Slater. Sold \$225.00 to Henry Martin on the usual terms.

November 19.

We accept merchandise returned from Alex Kohl as not perfect and issue a credit memo to him for \$15.00; at the same time we sell Mr. Kohl a further order totaling \$416.00 on the usual terms.

November 20.

A check for \$90.00 is drawn for our advertisements in the *Daily Home News* to date. Mr. Wells asks that a check for \$200.00

be drawn to his order for his personal use. (Open a drawing account for Mr. Wells.)

November 21.

A shipment and invoice arrive from the Thomas Brothers $710.00, terms 2/10 n/30. A check for $303.80 is drawn to the order of the Troy Machine Co. payment in full of our account to date.

November 22.

Mr. Wells instructs you to pay John Arnold his insurance bill in full $80.00. Mr. Wells made a special sale for cash $72.00 and turned over the money to you for deposit.

November 25.

A check arrived $284.20 from Alex Kohl payment of Nov. 14 invoice less the credit memo and proper discount. Mr. Wells gives you a personal check for $1000.00 to deposit to his business account as an additional investment.

November 26.

A new machine arrives by express from the Troy Machine Co.; the invoice price is $645.00, terms 2/10 n/30, but a check in amount of $55.00 is given to the Railway Express for charges on the machine. Sold to Henry Martin usual terms $406.00.

November 28.

Mr. Wells pays the Troy Machine Co. representative $60.00 for erecting and testing the new machine as per agreement. We give our 30-day 6% note to the Shultz Distributors for $1100.00.

November 29.

Mr. Wells' application for a bank loan has been approved, and the bank discounts Mr. Wells' note of 90 days for $2000.00, crediting his account with the proceeds. This loan was made to help out the General Wholesale Co. who are in financial difficulties and have offered Mr. Wells to surrender the $1800.00 note they held for $1700.00 spot cash. Mr. Wells takes up the note on their terms, advising you to credit the gain to Interest Earned.

November 30.

Four checks are drawn as follows: To the *Home News* Inc. for advertising $90.00; to the Standard Service Station for gas and oil used in truck to date $51.00, and to Universal Garage for repairs on truck $16.00, and for $260.00 salaries to date.

Required:

(1) Journal entries
(2) Post to ledger accounts
(3) Trial balance of the ledger

CHAPTER VIII

SPECIAL JOURNALS

INTRODUCTION

The general journal studied in Chapter VI would work quite satisfactorily in a business where the number of entries were few each day, but where the number of transactions are numerous the introduction of special journals becomes almost imperative. Special journals may be designed to accommodate many special situations. The principal special journals, and those found most frequently in practice, are the *Purchase Journal,* the *Sales Journal,* the *Cash Disbursements* book and the *Cash Receipts* book. The *General Journal* is still retained in such a system, but to handle only those transactions which cannot fit in the special journals, such as transactions with notes received from customers or notes given to creditors, purchase returns and allowances, and sales returns and allowances. Quite often two special journals will be merged, as in the voucher system, where the Purchase Journal and Cash Disbursements book may be combined. Accountants today will devise special journals to fit individual businesses and it is remarkable what efficient systems may be devised when a real specialist sets to work installing a special system. The guiding maxim used by accountants and one which should be kept in mind by anyone who designs a system, is that it shall give " the maximum of information with the minimum of effort."

The present chapter will confine itself primarily to a study of the Purchase Journal, the Sales Journal, and the two Cash Journals, together with the General Journal as used with these special journals.

THE PURCHASE JOURNAL

The Purchase Journal, as its name indicates, is designed to handle all purchases of merchandise. Before the book itself is presented, the evolution and need for it will be briefly reviewed.

Suppose the following five purchases are written into a two-column General Journal as explained in the last chapter.

DEMONSTRATION EXERCISE

1. Purchase on account from N. Y. Wholesale Co. $600.00.
2. Purchase on account from Excelsior Mfg. Co. $800.00.
3. Purchase on account from Trenton Co. $1200.00.
4. Purchase on account from Excelsior Mfg. Co. $400.00.
5. Purchase on account from N. Y. Wholesale Co. $1000.00.

Leaving out explanations, these entries would be recorded as follows:

–1–		
Purchases	$ 600.00	
N. Y. Wholesale Co.		$ 600.00
–2–		
Purchases	800.00	
Excelsior Mfg. Co.		800.00
–3–		
Purchases	1200.00	
Trenton Company		1200.00
–4–		
Purchases	400.00	
Excelsior Mfg. Co.		400.00
–5–		
Purchases	1000.00	
N. Y. Wholesale Co.		1000.00

If the journal entries just completed are studied, one point should stand out. The account, *Purchases,* is repeated five times and would be repeated as many times as there were purchases during the month.

The inefficiency of such procedure will be evident when the numbers of purchases are many. The same five transactions are now written into a special Purchase Journal.

PURCHASE JOURNAL

Date		Account Credit	Terms	Order No.	F	Amount	
Sept.	1	N. Y. Wholesale Co.	2/10 n/30	1375		600	00
	2	Excelsior Mfg. Co.	2/10 n/30	1376		800	00
	3	Trenton Company	Net 30 da.	1377		1200	00
	4	Excelsior Mfg. Co.	2/10 n/30	1378		400	00
	5	N. Y. Wholesale Co.	2/10 n/30	1379		1000	00
		Total Purchases for month debit				4000	00

In the General Journal five postings would have to be made to the *Purchases* account, and if 500 purchases were made, the *Purchases* account would be cluttered up with a great deal of useless detail. By the use of a special journal only one posting in total to the *Purchases* account is required. This would be true regardless of the number of purchases, and will offset the individual credits made to the various creditors' accounts. The management ordinarily wishes to know total purchases for the month or other accounting period, and this may be had from the *Purchases* account in the ledger. If any detail is desired regarding individual purchases, this can readily be had from the Purchase Journal. This is easier than the general journal method, for in the Purchase Journal only purchases are kept, whereas in the general journal all types of transactions are written in chronological order, with no attempt to classify. In both books individual posting to the various creditor accounts is necessary, and when the special journal is used this posting is done from day to day.

At the end of the accounting period only one posting to the *Purchases* account is required. This will complement all the individual credits and keep the ledger in balance.

SALES JOURNAL

Demonstration Exercise

1. Sold on Account $100.00 to S. Jacobs.
2. Sold on Account $60.00 to A. Frank.
3. Sold on Account $40.00 to L. Bond.
4. Sold on Account $80.00 to M. Tracey.
5. Sold on Account $120.00 to J. Fisher.

Omitting explanation and terms which we shall suppose are all alike, 2/10, n/30, these transactions would appear in the general journal as follows:

—1—

S. Jacobs	$100.00	
Sales		$100.00

—2—

A. Frank	60.00	
Sales		60.00

–3–

L. Bond	$40.00	
Sales		$40.00

–4–

M. Tracey	80.00	
Sales		80.00

–5–

J. Fisher	120.00	
Sales		120.00

If we again note the journal just completed, we shall see, as with the purchases illustration, the account *Sales* is written five times, and if there were five hundred sales the account *Sales* would be repeated that many times. The inefficiency here is the same as that illustrated with *Purchases*. The same sales transactions are now written into a sales journal.

SALES JOURNAL

Date		Account Debit	Invoice No.	F	Amount	
Sept.	1	S. Jacobs	K137		100	00
	2	A. Frank	K138		60	00
	3	L. Bond	K139		40	00
	4	W. Tracey	K140		80	00
	5	J. Fisher	K141		120	00
		Total Sales for Month Credit			400	00

In the general journal five separate postings are required to the sales account, while but one posting to the sales account is necessary when the special sales journal is used. The *Sales* account in the general ledger would contain only summary information rather than the great bulk of detail, which would result if the two-column general journal were used.

Of course, detail posting to the individual customer's accounts is required as before. The saving of time, space, and effort results from the single posting at the end of the period to the *Sales* account, instead of two or three thousand separate postings which would be necessary if the general journal were used. The economy of the special form journals is so obvious that today it is the exception not to find special journals in use.

It will be noticed that the form of the *Sales* book is very similar to that of the *Purchase* book, the only difference being the

posting, which is just the reverse of that in the *Sales* book. The books may, of course, be expanded in form, and more detail regarding the items purchased or sold could be provided for. However, inasmuch as a reference is made to the primary records, the purchase order, and sales invoice, it is ordinarily unnecessary to give any further detail.

THE CASH RECEIPTS JOURNAL

As purchases and sales are kept in special journals, so also are cash received and cash paid out kept in separate books.

In presenting the *Cash Receipts* journal we shall omit any demonstration exercise, presuming that by this time the student can readily recognize the economy and superiority of special journals.

CASH RECEIPTS JOURNAL

Date		Acct. Credit	Explanation	F	Total Cr.	Disct. on Sales Dr.	Net Amt. Recd. Dr.
Sept.	1	B. Brown, capital	Investment	√	3000 00		3000 00
	8	S. Jacobs	Pd. in full less 2%		100 00	2 00	98 00
	9	Rental Income	Recd. rent from 2d fl.		80 00		80 00
	10	M. Tracey	Ck. in full less 2%		80 00	1 60	78 40
	11	B. Brown, capital	Additional invest.		1000 00		1000 00
	12	L. Bond	Pd. in full less 2%		40 00	80	39 20
	17	J. Fisher	Pd. in full net		120 00		120 00
					4420 00	4 40	4415 60
					(√)	( )	( )

The transactions illustrated above are clear enough from the explanations given. The first entry will result in a credit to B. Brown Capital account. In the second entry S. Jacobs' account will be credited with $100.00, the amount in *Total* column. Mr. Jacobs paid us his account in full by remitting $98.00. The difference amounting to $2.00 is the sales discount, which we allow for prompt payment. The *Total* column is used for the amount to be posted to the account responsible for the remittance. In the illustration, Brown's Capital account,

S. Jacobs' account, Rental Income, M. Tracey, B. Brown Capital, Bond, and Fisher, will be credited individually with the *Total* amounts next to their names. The *Discount on Sales* column is posted only in total at the end of the month or other accounting period. Likewise, the *Net Cash* column is used only as a summary column with one posting at the end of the month to the debit of *Cash*.

Under the column *Total* is entered a check mark (√) to indicate that the items have been posted individually and do not require posting in total. Under the *Discount on Sales* column we usually write the number of the page in the ledger to which the total amount is posted; and in the same manner the page to which the *Net Cash Received* is posted is written under that column.

The equilibrium fundamental to double entry bookkeeping is established by the two summary debits, *Cash* $4415.60, and *Discount on Sales* $4.40, being equaled by individual credits, amounting in total to $4420.00.

CASH DISBURSEMENTS BOOK

CASH DISBURSEMENTS

Date		Acct. Debit	Explanation	F	Total Dr.		Disct. on Purch. Cr.		Net Cash Payt. Cr.	
Sept.	4	N. Y. Whlse. Co.	Pd. in full less 2%		600	00	12	00	588	00
	10	Taxes	Pd. ½ yearly tax		240	00			240	00
	12	Excelsior Mfg. Co.	Pd. inv. of 2 less disc.		800	00	16	00	784	00
	15	Stationery	Bought for cash		16	00			16	00
	20	Trenton Co.	a/c in full less disc.		1200	00	24	00	1176	00
	28	Insurance	Pd. for Fire Prot.		60	00			60	00
	30	Salaries	Pd. Office Salaries		120	00			120	00
					3036	00	52	00	2984	00
					(√)		( )		( )	

In this book the individual accounts are posted from day to day; the various creditors' accounts and expense accounts being debited with the amounts in the *Total* column. The *Discount on Purchases* column is posted in total at the end of the month to the credit of the Purchase Discount account. In the

illustration above the equilibrium is again maintained. A total debit to various individual accounts in amount of $3036.00 is offset by two credits: *Discount on Purchases* $52.00 and *Cash* $2984.00, both posted in total.

Sometimes the two cash books are bound in one. The left-hand page is reserved for *Cash Receipts,* while the right-hand is for *Cash Disbursements.* There are several reasons why this is not a good custom, although in a small business it is not objectionable.

Where the two books are bound in one, it is possible to portray the contrast between cash receipts and cash payments, and at the close of the accounting period to display the balance of cash.

In the average business *Cash Receipts* will require a great many more lines to record than will *Cash Payments,* because the receipts will be received in many small amounts, while payments for the most part will be made in larger amounts. This will result in the left-hand page being used, while the right-hand page is only half used. This waste of space is not the principal reason favoring the separate binding of the books. The fact that separate cash receipts and cash payments book permit a subdivision of labor is probably the chief reason for keeping the books apart.

CASH BALANCE — ILLUSTRATED

In the illustration, page 122, the *Cash Receipts,* including the proprietor's original investment, were $4415.60, while cash in amount of $2984.00 was paid out, leaving $1431.60 as the cash balance. This balance should be the balance of the Cash account in the general ledger.

At the start of the new month the *Cash Balance* may be, and often is, written in at the top of the *Net Cash* column in the cash receipts book, to which is added all cash received and the column footed daily so that the bookkeeper or the cashier may know at any time the balance of cash available for payments. If this is done, then at the close of the period the opening balance must be deducted from the total or *Net Cash Received* column, to arrive at the current amount received, which should then be posted to the debit of the cash account. This should be obvious

when we remember that the cash account in the general ledger reflected the cash balance at the beginning of the period; therefore, the only amount we should post is current cash receipts.

The handling of the *Cash Balance* is illustrated in the following abbreviated form:

CASH RECEIPTS

DATE 1940		ACCOUNT CREDIT	ITEMS	F	TOTAL CR.		SALES DISCOUNT DR.		NET RECEIVED DR.	
Oct.	1	Previous Month Balance							1,431	60
		(Then follows the			----	--	--	--	----	--
		entire months cash			----	--	---	--	---	--
		receipts which will			---	--	---	--	---	--
		be shown in detail,			----	--	---	--	----	--
		but which are not			----	--	---	--	----	--
		required in this			----	--	---	--	----	--
		illustration.			---	--	---	--	----	--
Oct.	31	Totals			9360	00	360	00	10431	60
		Deduct Oct. 1st Balance							1,431	60
		Totals to be posted			9360	00	360	00	9000	00
					(✓)		( )		( )	

THE GENERAL JOURNAL

Even when these four special journals are in use, there is still a function to be performed by the general journal. It must be used for those transactions which cannot be fitted into some of the special journals.

For example, if the company receives a note from a customer, the entry must go in the general journal, because the entry cannot be classed as a purchase or sale, nor has it anything to do with cash receivable or payments. When the customer pays the note at maturity, the cash receipts book will be utilized because then cash will be received. Similarly, should an organization give its note in payment of an account the general journal must be similarly used. Again also, when the note matures and is paid in cash, the cash disbursements book will be used to record the cash payment.

The general journal is used for all adjusting and closing entries. This work is reserved, however, for a future chapter and will be explained at that time.

Opening entries are usually written into the general journal in complete form, even though part of the entry may also be written in one or more special journals.

The following entry will illustrate:

Cash	√	3000	00			
Land & Buildings		8000	00			
Merchandise Inventory		2000	00			
Auto Truck		2000	00			
Mortgage Payable					5000	00
J. Brown, Capital					10000	00
To record Investment of Mr. Brown in the Printing Business.						

ENTRIES IN TWO JOURNALS AND CROSS-CHECKING

Often it will be desirable to enter certain items in two books, as in the journal entry above. The cash part of the investment may also be placed in the cash receipts book because in truth it is also a cash receipt. To prevent double posting under such circumstances it becomes necessary to cross-check the appropriate accounts in both journals.

In the general journal entry above it will be noted that *Cash* is checked, which means that the $3000.00, although written to the debit of *Cash*, is not to be posted from the journal. When it is so checked the amount is also written in the cash receipts book to the credit of *Brown Capital* account and there also in the folio column must be entered another check. This second check will prevent double posting of the credit to the proprietor's capital account. The double recording is made so that each journal will show all entries which pertain to it.

CASH SALES IN BOTH CASH RECEIPTS AND SALES BOOK

Cash Sales represents a receipt of cash and at the same time a sale. It is, therefore, desirable to record the facts in two journals.

Illustration. — Suppose a cash sale of $100.00 is made. The cash received would be entered in the cash receipts book as follows:

CASH RECEIPTS BOOK

Date	Account Credit	Explanation	F	Total Cr.		Sales Disct. Dr.		Net Cash Dr.	
19— Nov.	Sales	Cash Sale	√	100	00			100	00

and in the sales journal as follows:

SALES JOURNAL

Date	Account Debit	Invoice No.	F	Amount	
19— Nov.	Cash	Cash Sale	✓	100	00

In this manner the cash sale is entered in two books. The sales book will show sales from all sources, and the cash receipts book will exhibit cash received from all sources including sales. The cross-checking will prevent double posting, which must be guarded against.

OTHER SPECIAL JOURNALS

1. *Purchase Returns Journal.* — If returned purchases are few in number, then the general journal will be utilized; but, like all other transactions, just as soon as they become numerous, it will pay the bookkeeper to install a special journal.

A form such as the following might be used:

PURCHASE RETURNS JOURNAL

Date	Account Debit	Explanation	F	Amount	
19— Nov.	Excelsior Mfg. Co.	Returned not as sample		140	00
	Thompson Brothers, Inc.	Returned damaged		20	00

A book such as this would be handled just as the *Purchases* book, except, of course, that the accounts would now be debited, to show a reduction in the original amount credited in the purchase record. The form may be drafted to take care of any special information desired.

2. *Sales Returns Journal.* — Similarly, a special journal may be established to take care of sales returns and allowances any time such transactions are of sufficient frequency to warrant it. In general, the form would be similar to the purchase returns journal, just illustrated. The account heading would, of course, be credited, so that the customer would be given credit for any

merchandise returned. When special journals are operated for purchase and sales returns, only one posting is made at the end of the month to the *Purchase Returns* and *Sales Returns* accounts for the total. Individual postings must be made daily.

3. *Notes Receivable Journal.* — If an organization does a considerable amount of business with notes, then it may find it will save time and give better display to the notes if a special notes receivable register is maintained.

Several interesting forms have been devised to record notes received. The usual information desired is: (1) Date Received, (2) From Whom Received (Account to be credited), (3) Date of Note, (4) Amount of Note, (5) Term, (6) Rate of Interest, (7) Endorsers if any, (8) Date of Maturity.

In designing such a book the information could be set in separate columns as indicated above with a folio column inserted between columns 3 and 4. The date of maturity (8) above may occupy a whole page and be spread out into twelve columns, one for each month of the year. In this way the maturity dates may be easily watched.

In the same manner a *Notes Payable Register* may be installed if the number of notes given is numerous enough to warrant it.

4. *Other Special Journals.* — Other special journals may be designed to meet almost any situation. For example, a real estate organization might hold a great many mortgages and it would be desirable to have a *Mortgage Receivable Register* designed for it. System building is one of the valuable services rendered by the certified public accountant; however, we shall not trespass further in this elementary text. For our work we shall confine out attention to the first four special journals presented, namely, the *Purchase Book, Sales Book, Cash Receipts,* and *Cash Payments Book,* and the *General Journal* which we shall continue for all those transactions which we cannot fit into one of the four special journals.

QUESTIONS ON THE CHAPTER

1. Explain how special journals operate to save time, space, and effort.

2. Are there any other advantages in the use of special journals?

3. Rule and describe the form and illustrate with typical entries: (*a*) Purchase Book; (*b*) Sales Book; (*c*) Cash Receipts Book; (*d*) Cash Payments Book.

4. Explain the method of summary posting for each of the four special journals required above.

5. What do you understand by cross-checking?

6. Illustrate how cash sales may be recorded in both the Cash Receipts and the Sales Books.

7. Explain and illustrate how the cash balance may be written in the Cash Receipts Book.

8. Would you advocate combining the Cash Receipts and Cash Payments Books into one? Why?

9. Enumerate the advantages of special journals.

10. Explain how each of the following books should be posted: (*a*) daily, (*b*) monthly. Tell also how the ledger is kept in balance in each case.
    (1) Purchase Book
    (2) Sales Book
    (3) Cash Receipts Book
    (4) Cash Disbursements Book

11. What is the function of the general journal when special journals are in use?

PROBLEM MATERIAL

Problem 1

February 3, 19—.

E. Wilson has just started in the general merchandise business; he purchased the following assets from K. Tyler who is retiring from business. Store Equipment, valued at $1000.00; Office Equipment valued at $400.00; and an inventory of Merchandise costing $3000.00 which is less than current market value. Mr. Wilson asks you to operate a simple set of books consisting of a Purchase book, a Sales book, a Cash Receipts Book, a Cash Disbursements Book, and a General Journal as illustrated in Chapter VIII. He informs you that, in addition to the investment above, he has deposited $2500.00 to his business account in the Citizens' National Bank. You are to record the foregoing investments in the proper journals and enter the following selected transactions for the month of February:

February 4.
A shipment of merchandise arrived with invoice from Fredericks Manufacturing Co. total $810.40, terms 2/10 n/30. Paid rent $250.00.

February 5.
Mr. Wilson purchased new equipment for the store from the N. Y. Store Supply Co. for $260.00 terms net 30; sold on account to F. Aborn merchandise for $240.00, terms 2/10 n/30.

February 8.
A new typewriter was bought for the office for $125.00; purchased from Appleton Inc. merchandise which was received with an invoice for the amount of $396.20, terms 3/10 n/30.

February 9.
Cash Sales to date $113.00; sold G. Blume merchandise on account total $360.00, terms 2/10 n/30.

February 10.
Paid salaries for week $120.00.

February 11.
Purchased stationery forms for office amounting to $17.60.

February 12.
Invoice and shipment received and checked from Murphy Sales Inc. for $320.90, terms 1/10 n/30.

February 13.
Sold to H. Crone merchandise for $185.00, terms 2/10 n/30. Received check from F. Aborn for invoice of Feb. 5 less 2%.

February 15.
On this day Mr. Wilson discounted his 60-day note of $1000.00 at the Citizens' National Bank discount rate 6%; sold to J. Davis on account merchandise for $220.00, terms 2/10 n/30.

February 16.
Purchased from Gordon Hosiery Mills merchandise which was received today with an invoice amounting to $174.80 terms net 30 days. The merchandise was checked and found to be in conformity with invoice. Sold to F. Aborn merchandise for $375.00, terms 2/10 n/30.

February 17.
Check was received from G. Blume for invoice of Feb. 9 less 2%. Paid to Appleton Inc. invoice of Feb. 8 less 3%; paid salaries for week $120.00.

February 18.
F. Aborn returned merchandise claimed unsatisfactory, and we issued a credit memo for $45.00. Sold merchandise to G. Blume for $290.00, terms 2/10 n/30. We paid the Fredericks Mfg. Co. their invoice of Feb. 4 in full. They accept our 60-day 6% note for $500.00 and our check for $304.19 allowing us the 2% discount, although the discount period is past.

February 19.
Cash Sales to date were $210.00.

February 21.

Received shipment and invoice from Fredericks Mfg. Co. for merchandise purchased $640.00, terms 2/10 n/30; sold to J. Davis on account $275.00, terms 2/10 n/30; received check from H. Crone for invoice of Feb. 13 less discount. Bought postage stamps for $12.00 cash.

February 22.

Sent our check to Murphy Sales Inc. for invoice of Feb. 12 less discount; we returned merchandise to Gordon Hosiery Mills which we found to be imperfect, and for which we received a $26.00 credit memo.

February 23.

Received check from J. Davis for invoice of Feb. 15 less discount.

February 24.

Received check from F. Aborn for invoice of Feb. 16 less credit memo and discount.

February 25.

Received merchandise from Murphy Sales Inc. today with invoice for $284.50, terms 1/10 n/30; sold to F. Aborn on account $110.00, terms 2/10 n/30; paid salaries for the week $120.00.

February 27.

G. Blume purchased merchandise for the amount of $230.00, terms 2/10 n/30.

February 28.

Bought Land and Building for $5000.00 and as per agreement paid by check $2000.00 for down payment and gave mortgage for $3000.00; received goods and invoice from Appleton Inc. for the amount of $553.80, terms 3/10 n/30; cash sales to date were $146.00.

Required:

(1) Enter the transactions above as directed.
(2) Total and post all special journals.
(3) Trial balance of the general ledger.

PROBLEM 2

J. MacDonald Johnstone decides to enter the importing business and engages a suitable office and storage warehouse. You are to act as his bookkeeper, operating a set of books as outlined in Chapter VIII, consisting of four special journals and a general journal. Mr. Johnstone is an importer of Scottish woolens and specialties, and plans to sell to wholesale dealers. The following are his transactions for the month of May:

May 1, 19—.

Mr. Johnstone opened a checking account with the Broadway Trust Co. depositing $7200.00 to his business account. He pays $300.00 for rent to N. Y. Realty Co. He contracts with Mr. G. Losee to construct storage shelves and cabinets in the ware-

house for an agreed sum of $300.00 to be paid within 30 days, exclusive of lumber and hardware which Mr. Johnstone is to pay for separately. He pays out $240.00 to the Martin Lumber Mill for required lumber and $46.00 to the Thompson Hardware Co. for hardware and paints.

May 2.
The International Business Machines Co. furnish his office at a total cost of $220.00 paid in cash. Purchased from MacDonald Import Co. $1265.40, terms 2/10 n/30.

May 4.
Purchased from MacPherson Inc. $720.80 terms 2/10 n/30; he paid for one month's rent advertising $245.00.

May 5.
We returned to MacDonald Import Co. certain imperfect materials and issued a debit memo for $60.20.

May 6.
Sold to J. Kirkland $610.72, terms 2/10 n/30.

May 7.
Purchased from MacLeod Mfg. Co. $1860.00, terms 3/10 n/30.

May 8.
We received some merchandise returned from J. Kirkland as not satisfactory and issued a credit memo for $20.42.

May 10.
Paid MacDonald Import Co. the balance of invoice May 2 less discount. Purchased from MacTavish Mills $1470.00, terms 3/10 n/30. Sold to A. Clyde and Co. $284.20, terms 2/10 n/30.

May 11.
We return some damaged goods to MacTavish Mills $20.00 and issued a debit memo.

May 12.
Paid MacPherson Inc. invoice May 4 less discount.

May 14.
Purchased from MacDonald Import Co. $1190.70, terms 2/10 n/30; sold to MacNab and Cohn $824.00, terms 2/10 n/30.

May 15.
A. Clyde and Co. ask for an allowance for damages to shipment which we allow for $22.50. Sold to D. Fraser Ltd. $1200.00, terms 3/10 n/30. Paid salaries to date $320.00; paid George Losee his account in full. Received a check from J. Kirkland for $578.49 full payment of invoice May 6 less credit memo and discount.

May 16.
Gave MacLeod Mfg. Co. our check for $1804.20 full payment of invoice of May 7.

May 17.
Purchased from MacPherson Inc. $692.80, terms 2/10 n/30; sold to MacNab and Cohn $426.00, terms 2/10 n/30. Received a

check from A. Clyde for $256.47 full payment of May 10 invoice less the credit memo and discount.

May 18.

Gave MacTavish Mills our check $1406.50 full payment invoice of May 10.

May 20.

Received a shipment and invoice from the MacLeod Mfg. Co. total $2400.00, terms 3/10 n/30. Sold to J. Kirkland $206.80, terms 2/10 n/30. We accept a 60-day 6% note from D. Fraser Ltd. dated May 20 as payment of invoice of May 15. Gave the American Express Co. our check $64.00 express charges to date. We discount the Fraser note at our bank and receive credit for the net proceeds.

May 21.

We received a check for MacNab and Cohn full payment of May 14 invoice.

May 22.

Sold to D. Fraser Ltd. $1340.00, terms 3/10 n/30. The MacLeod Mfg. Co. agree to accept our 60-day 6% note for $2400.00 as full payment of invoice of May 20. Purchased MacTavish Mills, $1300.00, terms 3/10 n/30.

May 24.

The bank has approved our 60-day note for $1200.00, crediting our account with the proceeds. We send MacPherson Inc. our check for $678.94, full payment invoice May 17. Sold to Clyde and Co. $417.28, terms 2/10 n/30.

May 26.

Received a check for $417.48 from MacNab and Cohn full payment of May 17 invoice.

May 27.

Sold to J. Kirkland $714.00, terms 2/10 n/30; purchased from MacLeod Mfg. Co. $750.00, terms 3/10 n/30.

May 28.

Sold to D. Fraser Ltd. 3/10 n/30 total $620.00. Received from the American Express Co. $22.50 a full settlement of our claim for allowance made to A. Clyde and Co. May 15. Sent MacTavish Mills our check for $1261.00 as full payment invoice May 22. Sold to MacNab and Cohn $910.50, terms 2/10 n/30. Purchased MacPherson Inc., $820.30, 2/10 n/30.

May 31.

Paid salaries to date by check $320.00; sold to A. Clyde and Co. $472.50 terms 2/10 n/30.

Required:

(1) Enter the transactions above as directed.
(2) Total and post all special journals.
(3) Trial balance of the general ledger.

CHAPTER IX

SUBDIVISION OF THE LEDGER AND CONTROLLING ACCOUNTS

In the last chapter special journals were presented. One of the advantages of using special journals is that a subdivision of labor is made possible. In such a case, where more than one bookkeeper is working with the books of original entry, it will be necessary to have more than one ledger, because obviously two bookkeepers could not post to one ledger at the same time. Therefore, in any system of books, when it becomes necessary to expand the general journal it also becomes necessary to expand the general ledger.

The most appropriate division is to separate the accounts into three general groups and form three ledgers. The first group of accounts removed from the general ledger are the customers' accounts which are placed in a new binder to form the *Accounts Receivable Ledger.* Similarly, all creditors' accounts are removed from the general ledger and placed in another new binder to form the *Accounts Payable Ledger.*

The two newly formed ledgers are known as subsidiary ledgers, because the general ledger containing the remaining accounts must continue to be the principal book of final entry. It is therefore necessary that controlling accounts be established in the general ledger to maintain complete control over all accounts of the business.

FORMATION OF ACCOUNTS RECEIVABLE LEDGER

The modern loose-leaf system makes the actual separation of the books quite a simple matter. It is only necessary to purchase two new binders similar to the general ledger, and remove all customers' accounts to one of the new binders. With this done, it is then necessary to place a controlling account in the general ledger to represent the accounts removed.

Illustration. — Suppose the trial balance on the following page is taken from the ledger of the Holland Wholesale Grocery Company.

Trial Balance

Cash	$ 16,430.00	
Land and Buildings	40,000.00	
Inventory of Groceries	132,800.00	
Storeroom Fixtures	52,600.00	
Delivery Equipment	50,000.00	
Customer 1	1,400.00	
Customer 2	1,600.00	
Customer 3	3,200.00	
Customer 4	1,800.00	
Customer 5	1,200.00	
Customer 6 to 240 (detail amounts omitted to conserve space)	228,000.00	
Notes Receivable	36,000.00	
Notes Payable		$ 60,500.00
Mortgage Payable		25,000.00
W. Holland Capital		113,160.00
Taxes	1,600.00	
Insurance	2,400.00	
Heat & Light	240.00	
Purchases	292,000.00	
Interest Cost & Discounts	6,240.00	
Interest Income & Discounts		4,800.00
Sales		472,000.00
Newark Grocery Co.		17,500.00
Wilburt Supply Co.		8,950.00
Chieftain Products Corporation		24,720.00
General Distributing Co., Inc.		16,880.00
Creditors 5 to 96, inclusive		124,000.00
	$867,510.00	$867,510.00

In the trial balance illustrated, note that there are 240 customers' accounts, although detail amounts for only five are given. The remaining accounts are summarized to save space in listing. In actual practice, however, the length of this trial balance and the size of the ledger can well be imagined, for the 240 customers' accounts are not a great many for a wholesale grocery company; perhaps 2400 would be more nearly correct. The principle involved, however, is the same.

The bookkeeper will first remove the 240 customers' accounts from the old loose-leaf binder and place them in a new one. This done, he must then open the *Accounts Receivable Controlling Account* in the general ledger to take the place of the accounts just removed.

ACCOUNTS RECEIVABLE CONTROLLING ACCOUNT

Defined. — A *Controlling Account* is an account kept in the general ledger to control a group of similar accounts kept in a subsidiary ledger. The balance of a controlling account should equal the total of all individual account balances kept in the subsidiary ledger, which it controls.

The *Accounts Receivable Controlling Account,* also known as the customers' controlling account, controls all the customers' or accounts receivable accounts.

ESTABLISHMENT OF ACCOUNTS RECEIVABLE LEDGER AND CONTROLLING ACCOUNT

If the general ledger and the new subsidiary ledger are similar loose-leaf books, then it will be necessary for the bookkeeper only to transfer the individual customers' accounts to the new binder and open in their place a single controlling account. It may be desirable to make formal note of this transfer, in which case a memorandum or proforma entry might be written in the general journal, indicating the status of the several individual accounts transferred. This may consist of a brief statement together with a typed list of the accounts transferred and their balances, the total of which would be equal to the debit balance in the controlling account substituted in their stead.

ACCOUNTS RECEIVABLE CONTROLLING ACCOUNT ILLUSTRATED

Accounts Receivable Controlling Account

(1) Debit with total of balance of all customers' accounts transferred. (When the account is first established.) (2) Debit at the end of each accounting period with total credit sales from the Sales Journal.	(3) Credit at the end of the accounting period with all cash received from customers from a special column in the Cash Receipts Journal. (4) Credit at the end of the accounting period, with total of all notes received from customers and allowances made for sales returns. This amount will come from a special column in the new General Journal.

The balance of this account will be on the debit side and represent the total due from customers and be exactly equal to

the total of all customers' account balances in the Accounts Receivable Ledger.

ACCOUNTS PAYABLE CONTROLLING ACCOUNT

This controlling account must be opened in the general ledger to take the place of all the individual creditors' accounts which are to be placed in a new subsidiary ledger.

ESTABLISHMENT OF ACCOUNTS PAYABLE LEDGER AND CONTROLLING ACCOUNT

The following journal entry will act as authority for the transfer of all the accounts payable accounts, from the general ledger to the subsidiary accounts payable ledger, and will at the same time establish the *Accounts Payable Controlling Account* in the general ledger to take the place of the individual accounts transferred.

GENERAL JOURNAL

Newark Grocery Co.	$ 17,500.00	
Wilburt Supply Co.	8,950.00	
Chieftain Products Corporation	24,720.00	
General Distributing Co., Inc.	16,880.00	
Creditors 5 to 96	124,000.00	
Accounts Payable Controlling Account		$192,050.00
To record the transfer of 96 creditors' accounts from the General Ledger to the new Accounts Payable Ledger. (As the binders are loose-leaf the accounts are simply transferred, and in their place is opened a controlling account.)		

This entry is similar to one which might have been written when establishing the Accounts Receivable Ledger and would be all that is necessary to establish the new subsidiary ledger and appropriate controlling account.

This formal entry may be omitted and only a memorandum noting the transfer written in the journal.

ACCOUNTS PAYABLE CONTROLLING ACCOUNT ILLUSTRATED

Accounts Payable Controlling Account

(1) Credit with total of balances of all creditors' accounts transferred (when account is first established). (2) Credit at the end of each accounting period with total purchases from the Purchases Journal.	(3) Debit at the end of each accounting period, with all cash paid to creditors from a special column in the Cash Disbursements Book. (4) Debit at the end of each accounting period with total of all notes given to creditors and allowances for merchandise returned to creditors. This amount will come from special column in the new General Journal.

The balance will be on the credit side and will represent the total due to creditors, and should be exactly equal to the total of all creditors' balances in the accounts payable ledger.

JOURNALS RE-DESIGNED FOR CONTROLLING ACCOUNTS

SALES JOURNAL

When controlling accounts are in use, the simplest form of *Sales Journal* will be a three-money-column book, one column for the *Sales on Account*, one for *Cash Sales*, and a third for *Total Sales.*

Sales Book

Date		Account Debit	Invoice No.	F	Sales on Account Dr.		Cash Sales Dr.		Total Sales Cr.	
Nov.	1	Customer One	1420		3,500	00			3,500	00
	1	Cash	Cash Sales for week	√			230	00	230	00
	2	Customer Two	1421		3,400	00			3,400	00
	3	Customer Three	1422		1,900	00			1,900	00
	4	Customer Four	1423		3,900	00			3,900	00
	5	Customer Five	1424		2,800	00			2,800	00
	8	Cash	Cash Sales for week	√			340	00	340	00
					15,500	00	570	00	16,070	00
					( )		(√)		( )	

POSTING INSTRUCTIONS

From day to day post to *Customers' Accounts* in the accounts receivable ledger a debit for each sale made as recorded in

Sales on Account column. The total of this column must be posted to the *Accounts Receivable Controlling Account* at the end of the month. The cash debits for cash sales are checked, indicating that these are not to be posted from this journal. They are, however, as explained before, posted from the cash book as cash receipts. The *Total Sales* column must be posted in total at the end of the accounting period to the credit of *Sales*.

CASH RECEIPTS JOURNAL WITH CONTROLLING ACCOUNTS

CASH RECEIPTS

Date		Account Credit	Explanation	F	Cr. Gen. Ledger		Cr. Cash Sales		Cr. Accts. Rec. Cont.		Dr. Disct. on Sales		Dr. Net Cash Rec'd.	
Nov.	1	Sales	C.S. for week	√			230	00					230	00
	3	Customer One	Acct. less 2%						1900	00	38	00	1862	00
	5	Customer Two	Acct. less 2%						1200	00	24	00	1176	00
	7	Customer Three	Acct. less 2%						3200	00	64	00	3136	00
	9	Customer Four	Acct. less 2%						900	00	18	00	882	00
	11	Customer Five	Acct. less 2%						800	00	16	00	784	00
	15	Sales	C.S. for week	√			340	00					340	00
	20	Notes Payable	Borrowed from Bank		1000	00							1000	00
	25	T. Holland, Capital	Additional Investment		500	00							500	00
					1500	00	570	00	8000	00	160	00	9910	00
					(√)		(√)		( )		( )		( )	

POSTING INSTRUCTIONS

The *General Ledger* column is reserved for miscellaneous items to be posted daily to the respective accounts in the general ledger. The *Cash Sales* are checked, because the sales credit was made from the sales book, and this signal is to prevent an inexperienced bookkeeper from making a double posting.

The third money column is reserved for cash credits to customers remitting. In the foregoing example each customer will be credited in the accounts receivable ledger with the gross amount appearing in the third column. The *Discount on Sales* column should be posted in total at the end of the period to the debit of the discount on sales account in the general ledger. The last column *Net Cash Received* will be posted only in total, once at the end of the accounting period to the debit of the *Cash* account.

GENERAL JOURNAL — NEW FORM

Just as soon as subsidiary ledgers and controlling accounts are established, it will be necessary to adopt a new form of general journal. The six-column general journal illustrated below is a form quite frequently used in practice to make posting to controlling accounts more convenient.

GENERAL JOURNAL

Accts. Payable Dr.	Accts. Rec. Dr.	General Ledger Dr.	F	Entry	F	General Ledger Cr.	Accts. Rec. Cr.	Accts. Payable Cr.
				1				
		300.00		Sales Returns				
				Customer Four			300.00	
				To record merchandise returned by customer four				
				2				
		2500.00		Notes Receivable				
				Customer Four			2500.00	
				To record receipt of a 60-day 6% note from customer four.				
				3				
		180.00		Office Equipment				
				N.Y. Office Supply Co.				180.00
				To record purchase of new desk.				
				4				
	60.00			Customer Fifteen				
				Sales		60.00		
				To correct invoice #1535-item omitted.				
				5				
5000.00				General Distributing Co.				
				Notes Payable		5000.00		
				We gave 60-day note 6% to Gen. Distributing Co.				
				6				
650.00				Wilburt Supply Co.				
				Purchase Rets.		650.00		
				We returned merchandise as not satisfactory.				
		2980.00	√		√	5710.00		
	60.00	60.00		Accts. Rec. Control		2800.00	2800.00	
5650.00		5650.00		Accts. Payable Control		180.00		180.00
		8690.00				8690.00		

POSTING INSTRUCTIONS

Perhaps the best way to explain posting this new six-column general journal will be to explain briefly each of the six selected

transactions. The first transaction records the usual sales return; the *Sales Returns* account is kept in the general ledger and therefore recorded in the *General Ledger* column. The credit to Customer Four is entered in a special column reserved for credits to customers. In the second transaction *Notes Receivable* is debited in the *General Ledger* column, while the credit is entered in the special column for *Accounts Receivable.* The third entry illustrates the purchase of an asset, which must be entered in this book as a debit to *Office Equipment* in the *General Ledger,* and a credit to the N. Y. Office Supply Co. in the special column provided for credits to *Accounts Payable.* The fourth entry is a correction entry, and utilizes the special column for *Accounts Receivable* debits, the credit to sales is entered in the *General Ledger* column. The fifth entry debits the General Distributing Company through the special column provided for *Accounts Payable* debits; the credit to *Notes Payable* is entered in the *General Ledger* column because the *Notes Payable* account is a *General Ledger* account. The sixth entry records a purchase return made to one of our creditors. The *Purchase Returns* account is in the *General Ledger* where the credit is entered, while the corresponding debit is entered in the special column reserved for *Accounts Payable* debits.

SUMMARY POSTING OF GENERAL JOURNAL

At the end of the accounting period all six columns are totaled. The totals of the *Accounts Receivable* and *Accounts Payable* ledger columns are then brought over and entered in the *General Ledger* columns debit and credit, respectively. These totals are the controlling postings, balancing those previously made individually to the customers' and creditors' accounts in the respective subsidiary ledgers. By so doing the general ledger is kept in balance, having $8690.00 *Total Debits* offset by $8690.00 *Total Credits.*

PURCHASE JOURNAL

It will not be necessary to redesign the purchase journal. Postings from the old form will be a little different and more complete, however, because of the *Accounts Payable Controlling Account.* A purchase journal with a few purchases to be re-

corded to *Accounts Payable* of the Holland Grocery Company is presented here so that a practice set which is to be presented shortly may utilize this book.

PURCHASE JOURNAL

Date		Account Credit	Purchase Order No.	F	Amount	
Nov.	4	Newark Grocery Co.	13729		4,200	00
	6	Wilburt Supply Co.	13730		1,700	00
	8	Chieftain Products Corp'n	13731		3,400	00
	10	General Distributing Co.	13732		2,900	00
		Total Purchases Dr.	Accounts Payable	Cr.	12,200	00

Posting Instructions: The individual credits to the *Accounts Payable* accounts, will be made as before, except that now these accounts will be found in a new subsidiary ledger. The total debit as before must, of course, be made in total to the *Purchases* account in the general ledger. In addition a credit for the total purchases must be entered in the *Accounts Payable Controlling Account* in the general ledger.

CASH DISBURSEMENTS JOURNAL WITH CONTROLLING ACCOUNTS

The *Cash Disbursements* book illustrated on the following page is designed to record all cash paid out by the business. The first column to the right of the date column is headed *Account Debit.* Herein is written the name of the account to be charged with the cash disbursement. Every account listed will be debited, some in the general ledger, others in the accounts payable ledger. The next two columns are devised to keep the groups of accounts separate. The first money column is designed to list miscellaneous general ledger accounts similar to the *General Ledger* column in the cash receipts book. The accounts entered in this column are posted separately from day to day. The *Accounts Payable Controlling* column is designed to keep all accounts paid to creditors, and these amounts are posted from day to day to the debit of the various creditors' accounts in the accounts payable ledger. The total of the *Accounts Payable* column at the end of the accounting period is posted as a debit to the *Accounts Payable Controlling* account

in the general ledger. This keeps the general ledger in balance with the subsidiary accounts payable ledger. The amounts entered in the first two money columns are the gross amounts to be debited, while the discount taken is recorded in the next column to the right. The total discounts taken are posted only once a month, or at the end of any other accounting period. The net amount disbursed, similarly, is posted only in total, to the credit of the *Cash* account in the general ledger.

Cash Disbursements

Date		Account Debit	Explanation	F	Gen. Ledger Dr.		Accts. Payable Dr.		Purch. Disc't. Cr.		Net Cash Paid Cr.	
Nov.	1	Newark Grocery Co.	less 2%				6,400	00	128	00	6,272	00
		Rent	for month		200	00					200	00
		Wilburt Supply	less 2%				2,000	00	40	00	1,960	00
		Salaries	for week		750	00					750	00
		Chieftain Products Corp'n	less 2%				1,500	00	30	00	1,470	00
		Heat & Light	for month		96	00					96	00
		General Distributing Co.	paid after disc't. per'd				3,280	00			3,280	00
					1,046	00	13,180	00	198	00	14,028	00
					Dr.		Cr.					
		General Ledger		√	1,046	00						
		Accounts Payable Controlling			13,180	00						
		Purchase Discounts					198	00				
		Cash					14,028	00				
					14,226		14,226	00				

The summary posting is indicated just below the last entries. The *General Ledger* debit is checked because the items have already been individually posted to the general ledger. The next debit is to the *Accounts Payable Controlling Account*, and is made although the separate items were posted to the individual accounts. This is so because the individual posting is made to the subsidiary ledger, while the summary posting is made to the controlling account in the general ledger. The postings to the credit of the *Discount on Purchases* and *Cash* accounts are made in summary. This completes the summary posting to the general ledger; total debit postings are equaled by total credit postings, in this instance the amount is $14,226. Thus the equilibrium of the general ledger is maintained.

PRACTICE SET FOR ACCOUNTS RECEIVABLE

At this time it might be well to work out a short practice set, in which we can illustrate the principles so far presented. In doing this we shall select the first five customers' accounts of the Holland Wholesale Grocery Company, and post to these accounts, and to the *Accounts Receivable Controlling Account* the entries affecting these accounts which are written in the journals just presented.

Let us suppose that the Holland Wholesale Grocery Company's accounts receivable totaled only $9200.00 and consisted of just five customers with balances as listed before. Such a number of accounts would not, of course, warrant subdividing the general ledger; but we shall do that very thing, using the five accounts, in theory, at least, exactly as we should handle 240 in actual practice.

Step No. 1. Five customers' accounts are transferred.

ACCOUNTS RECEIVABLE LEDGER

Customer 1

Balance	1400.00	

Customer 2

Balance	1600.00	

Customer 3

Balance	3200.00	

Customer 4

Balance	1800.00	

Customer 5

Balance	1200.00	

Step No. 2. In the General Ledger we must place the following controlling account:

Accounts Receivable Control

Balance of accounts transferred	9200.00	

Step No. 3. Let us suppose that the transactions from the sales book, cash receipts book, and general journal affecting these

five customers have been posted, then the accounts would look as follows. And assume also that the summaries, as they would affect these same five accounts, were posted in the *Accounts Receivable Controlling Account.*

ACCOUNTS RECEIVABLE LEDGER

Customer 1

Balance	1400.00	C.R.	1900.00
S.J.	3500.00		

Customer 2

Balance	1600.00	C.R.	1200.00
S.J.	3400.00		

Customer 3

Balance	3200.00	C.R.	3200.00
S.J.	1900.00		

Customer 4

Balance	1800.00	C.R.	900.00
S.J.	3900.00	Rets. } J	300.00
		Note } J	2500.00

Customer 5

Balance	1200.00	C.R.	800.00
S.J.	2800.00		

GENERAL LEDGER

ACCOUNTS RECEIVABLE CONTROL

Total Balances Transferred	9200.00	Total Cash Received from customers C.R.	8000.00
Total Sales S.J.	15500.00	Notes recd. and Sales rets. — (from spl. col. in general journal) J.	2800.00

SUMMARY OF PRACTICE SET

If each customer's account is balanced, we shall note Customer 1 owes us exactly \$3000.00; Customer 2 owes \$3800.00; Customer 3 owes \$1900.00; Customer 4 owes \$2000.00 and customer 5 owes \$3200.00, or a grand total of \$13,900.00. This amount is the exact balance of the *Accounts Receivable Controlling Account.*

PRACTICE SET FOR ACCOUNTS PAYABLE

At this point we shall present a practice set for *Creditors'* accounts and *Accounts Payable Controlling Account,* very similar to the case completed for the *Accounts Receivable.*

Let us take for our example the first four creditors' accounts of the Holland Wholesale Grocery Company, and treat them exactly as we might treat three or four hundred creditor accounts in actual practice.

Step No. 1 removes these accounts from the general ledger to their new home in the Accounts Payable Ledger, which is illustrated below.

ACCOUNTS PAYABLE LEDGER

Newark Grocery Company

		Balance	17,500.00

Wilburt Supply Co.

		Balance	8,950.00

Chieftain Products Corp'n

		Balance	24,720.00

General Distributing Co.

		Balance	16,880.00

Step No. 2 will establish an *Accounts Payable Controlling Account* in the general ledger.

ACCOUNTS PAYABLE CONTROL

		Total Balances of accounts transferred	68,050.00

Now, let us suppose that the transactions from the purchase record, the cash disbursements book, and the general journal have been posted to the four creditors' accounts in the accounts payable ledger, and that the summaries have been posted to the *Accounts Payable Controlling Account* in the general ledger. Then the two ledgers would appear as follows:

ACCOUNTS PAYABLE LEDGER

Newark Grocery Company

C.D.	6,400.00	Balance	17,500.00
		P.	4,200.00

Wilburt Supply Co.

C.D.	2,000.00	Balance	8,950.00
J.Returns	650.00	P.	1,700.00

Chieftain Products Corp'n

C.D.	1,500.00	Balance	24,720.00
		P.	3,400.00

General Distributing Co.

C.D.	3,280.00	Balance	16,880.00
J. Note	5,000.00	P.	2,900.00

GENERAL LEDGER

Accounts Payable Control

Total cash paid	C.D.	13,180.00	Balance of accounts opened		68,050.00
Total from Spl. Col. in Journal	J.	5,650.00	Total Purchases	P.	12,200.00

SUMMARY OF PRACTICE SET

If each creditor's account is balanced we shall note that the business owes the Newark Grocery Company $15,300.00; the Wilburt Supply Co. $8000.00; the Chieftain Products Co. $26,620.00, and the General Distributing Co. $11,500.00, or a grand total due Creditors of $61,420.00. Now, if the *Accounts Payable Controlling Account* is balanced, a credit balance of an exactly equal amount will be the result.

OTHER CONTROLLING ACCOUNTS

The two controlling accounts just studied are the most widely used controlling accounts. There are, however, situations which arise in some businesses which can best be served by the introduction of special subsidiary ledgers and appropriate controlling accounts. Often in a manufacturing company, where there are a great many pieces of machinery, rather than try to keep all machinery and equipment in one account, the *Machinery and Equipment* account may be maintained in the general ledger as a controlling account; while in a subsidiary machinery ledger an account frequently in the form of a card will be maintained for each piece of machinery owned. Such cards will show the exact cost of each machine and any other information which will be helpful in controlling this valuable asset. As expenditures are made for machinery, appropriate entries are made in the machinery ledger, and at the end of the period summaries of the entries affecting machinery will be posted to the controlling account. Similarly, if a company owns several parcels of real estate and buildings, a real estate ledger and corresponding *Real Estate Controlling* account would be appropriate. If a company owns many mortgages, it might be a good idea to set up a mortgage ledger, in which could be maintained individual

records for each mortgage held. If such a subsidiary ledger were kept, then an appropriate controlling account such as *Mortgages Receivable* would have to be placed in the general ledger to take the place of the several mortgage accounts transferred. It may be noted, then, that in practice a subsidiary ledger and related controlling account may be established any time a group of similar accounts grows to the point where it is felt advantageous to segregate the accounts.

ADVANTAGES OF CONTROLLING ACCOUNTS

In general, and briefly, the benefits derived from the use of controlling accounts and subsidiary ledgers are as follows:

(1) The trial balance of the general ledger is shortened by the removal of each group of similar accounts. Therefore the work of preparing the trial balance is shortened, and since there are fewer accounts the likelihood of error is greatly reduced. The preparation of statements is simplified by the shorter trial balance of the general ledger.

(2) Not only are the errors in the general ledger greatly reduced, but by keeping all similar accounts together the likelihood of errors in the subsidiary ledgers is also reduced. This is true because bookkeepers working on only one type of account become highly skilled, and the chance of their making careless errors is greatly reduced. The controlling accounts are usually conceded by experienced bookkeepers to be correct, because so few entries are made. Therefore, if the list of subsidiary ledger accounts agrees with the controlling account balance the bulk of the bookkeeping work for the period may be conceded to be correctly done.

QUESTIONS ON THE CHAPTER

1. Why is it necessary to subdivide the general ledger?
2. What advantages are there to subdividing the general ledger?
3. Briefly state your idea of a controlling account. Illustrate and give the functions of one.
4. Should the total of the balances in the subsidiary ledger always agree with the balance of the controlling account? If there is disagreement what are some of the likely causes of difficulty? Which total is more likely to be correct? Why?
5. Post the following summarized information to two appropriate controlling accounts:

The balance due from Customers at November 1st was $20,000; Total purchases for November amounted to $33,000; Sales for the same period were $32,000; Sales Returns amounted to $2000; Purchase Returns amounted to $1200; Total Cash Received from Customers amounted to $28,000; Total Cash Paid to Creditors was $22,800.

Notes in amount of $5000 were received from customers. Notes were given to firm creditors in amount of $6000.

6. How are responsibility and accuracy promoted by the use of controlling accounts?

7. If you were head bookkeeper for a large mercantile organization and had two assistants to help you, what work in general would you assign to each assistant? Why?

8. If you were head bookkeeper, and your *Accounts Receivable Controlling* account showed $64,000 due from customers, and the assistant bookkeeper who operated the accounts receivable ledger took off a list of open balances totaling $64,520,

(*a*) Which balance is most likely correct? Why?

(*b*) What error might be responsible for such a situation?

9. Explain the posting of the sales book:

(*a*) With reference to individual accounts.

(*b*) With reference to controlling account.

(*c*) Show how the general ledger is kept in balance.

10. Explain the operation of the purchase journal:

(*a*) With reference to posting to individual accounts.

(*b*) Indicate how balance is maintained in the general ledger through summary posting.

11. Explain how double posting is avoided when cash sales are kept in both the sales book and the cash receipts journal.

12. Explain the summary posting of: (*a*) the cash receipts journal:

(*b*) The cash payments journal.

13. (*a*) Describe the six-column form of general journal, and give the functions of each column.

(*b*) Give advantages of using such a journal.

14. List and discuss briefly the advantages of Controlling Accounts and subsidiary ledgers.

15. (*a*) Draw a large T ledger account for the *Accounts Receivable Controlling* account and write in the debits and credits which are made each month; also explain what the balance represents.

(*b*) Do the same for the *Accounts Payable Controlling* account.

PROBLEM MATERIAL

PROBLEM I

February 4, 19—.

T. Riley starts business as a mill representative, dealing directly at wholesale with department stores. His investment consists

of the following: Auto Equipment, used, but conservatively valued at $4000.00; a stock of merchandise also conservatively valued at $2400.00; Land & Building to be used as a storage warehouse and office owned free and clear, conservatively valued at $6000.00. Notes Payable $3000.00. In addition Mr. Riley has $8000.00 which he places to his business account.

A shipment with invoice arrives from the Morrison Mills total $1200.00 terms 3/10 n/30.

February 5.

Paid by check $16.00 for printing and stationery.

February 6.

A purchase with invoice arrives from the Trenton Mills total $3000.00 terms 3/10 n/30. Sold to Wanamakers Inc. total $324.00 (all sales are on account and terms are uniform 2/10 n/30).

February 7.

Cashed a check for $12.00 for postage stamps.

February 8.

Sold to Taylor & Lords $414.00. Purchased from Hampton Inc. $680.00 terms 1/10 n/30.

February 9.

We returned some damaged merchandise received from Hampton Inc. and issued a debit memo for $30.00.

February 10.

Received a check $317.52 from Wanamakers Inc. as payment in full invoice Feb. 6.

February 12.

Purchase received from Shetland Mills invoice total $940.00 terms 2/10 n/30. Sold to Gimbels Inc. $618,00. Sent our check $1164.00 to the Morrison Mills invoice Feb. 4 in full. Received a check from Taylor & Lords $405.72 invoice of Feb. 8.

February 14.

Sent our check to Trenton Mills $2910.00 invoice Feb. 6 in full. Sold to Saks & Co. $720.00. Received a shipment with invoice from Morrison Mills total $1380.00 terms 3/10 n/30.

February 15.

Sent our check to Hampton Inc. $643.50 payment in full invoice Feb. 8 less debit memo. Gave our check for $214.00 to the tax collector as payment of the first half year's taxes due today.

February 16.

Sold to Taylor & Lords $860.00. A purchase and invoice arrived from Hampton Inc. total $1000.00 terms 1/10 n/30.

February 18.

Sold to Gimbels Inc. $920.00. A shipment and invoice arrived from the Trenton Mills total $2100.00 terms 3/10 n/30. Purchased stationery & letterheads $24.00 for which check is drawn. A check for $605.64 was received from Gimbels Inc. Payment invoice Feb. 12 in full.

February 20.

Sold to Wanamakers Inc. $540.00. A purchase and invoice arrived from the Shetland Mills total $910.00 terms 2/10 n/30. Received a check $705.60 from Saks & Co. for invoice of Feb. 14 in full.

February 21.

Sent check to the Shetland Mills for invoice of Feb. 12 in full $921.20.

February 24.

Sold to Saks & Co. $964.00 and to Taylor & Lords $526.00. Shipments arrived from Hampton Inc. $1400.00 terms 1/10 n/30 and from the Morrison Mills $1420.00 terms 3/10 n/30. Purchased for cash twine for shipping department; total was $6.40 with a 2% discount. Our check was $6.27.

February 25.

Received Taylor & Lord's Check $842.80 on payment in full Feb. 16 invoice.

February 26.

Sold to Gimbels Inc. $714.00. Received a shipment and invoice from the Trenton Mills $870.00 terms 3/10 n/30. We received some merchandise valued at $62.00 returned from Saks & Co. as not per sample; we issued a credit memo. Received a shipment of boxes, paper and other wrapping materials from Gair Box Co. total $310.00 terms 3/10 n/30.

February 28.

Paid salaries for the month total $600.00. Sent our check for $2037.00 to the Trenton Mills for invoice Feb. 18 in full. Received a check from Wanamakers Inc. $531.20 invoice Feb. 28 in full. A purchase and invoice arrived from Shetland Mills total $1300.00 terms 2/10 n/30. Made sales to Wanamakers Inc. $800.00 and Saks & Co. $410.00. A check of Gimbels invoice of Feb. 26 reveals an error in billing, correct amount should have been $724.00. We send a corrected invoice with a letter of explanation.

Required:

(1) Enter the transactions above as directed.
(2) Total and post all special journals.
(3) Trial balance of general ledger.
(4) Prove totals of controlling accounts with totals of subsidiary ledgers.

PROBLEM 2

December 1.

Mr. George K. Hawkins starts business this day with a cash investment of $12,000.00. You are to open a Purchase Journal, a Sales Journal, a Cash Receipts Journal, a Cash Payments Journal, and a six-column general journal form as illustrated in Chapter IX. You are to operate beside the General Ledger two sub-

sidiary ledgers, one for Accounts Receivable and the other for Accounts Payable. Enter the foregoing investment and the following selected transactions. Paid December rent to the Mutual Realty Co. $320.00. A shipment arrived from the Northern Fur Company together with an invoice in amount of $1800.00 terms 2/10 n/30, also a shipment and invoice from the Brockton Shoe Co., total $2400.00 terms 2/10 n/30. Sold to A. Diebolt $720.00 (all sales unless otherwise noted are on account and with uniform credit terms namely 2/10 n/30).

December 2.

Sold on account to L. Ketchum $810.00. Received shipments and invoices from the Morton Supply Co., total $720.00, and from the General Supply Co., total $1200.00. (These and all other purchases are made on uniform credit terms 2/10 n/30.)

December 3.

Sold to B. Lynch $965.00.

December 4.

Drew a check for $12.00 and cashed it at our bank for purchase of postage stamps. Sold to S. Wilkes $320.00.

December 5.

Mr. Hawkins authorizes you to draw a check for $100.00 to establish a petty cash fund.

December 6.

We return shoes, which arrived in a damaged condition, to the Brockton Shoe Co. and they allow full credit $40.00. Mr. Hawkins requests you to draw a check for $125.00 in payment of a new typewriter for your office, which he just purchased. There were sundry cash sales for the week which total $270.00.

December 7.

Sold to F. Smith $480.00.

December 8.

Sold to B. Lynch $715.00. Received a check in amount of $705.60 from A. Diebolt payment of invoice of December 1. Received an invoice and shipment from the Brockton Shoe Co., $1800.00.

December 9.

Received a shipment and invoice from the Northern Fur Co. in total $2000.00. Received a check from L. Ketchum $793.80 payment of invoice of December 2. Sold to L. Ketchum $752.00. Paid by check express charges $22.00.

December 10.

Paid by check Northern Fur Co. Invoice of December 1 less the discount and paid the Brockton Shoe Co. their invoice of December 1 less the discount.

December 11.

Sold to S. Wilkes $980.00. Received a check from B. Lynch $945.70 full payment invoice of December 3. Sent checks to the Morton Supply Co. for their invoice of Dec. 2 less the dis-

count, and the General Supply Co. for their invoice of Dec. 2 less the discount.

December 12.

Mr. Hawkins asks you to draw a check to his order in amount of $200.00 for his personal use. (Open a drawing account for Mr. H.)

December 13.

Received a check $313.60 from S. Wilkes for his invoice of Dec. 4. There were sundry cash sales for the week in total $310.00.

December 15.

Mr. Hawkins gives you his personal check for $3000.00 which you are to deposit as an additional investment. Sold to A. Diebolt $440.00. A credit memo is sent to L. Ketchum $32.00 for merchandise returned not as per sample.

December 16.

Mr. Hawkins requests you to draw a check to the order of the Globe Advertising Agency $600.00 advertising to date; and a check for $425.00 for salaries to Dec. 15. Received a check $470.40 from F. Smith for his invoice of Dec. 7. Purchases from the General Supply Co. $1400.00. Sold to B. Lynch $325.00. Purchased Morton Supply Co. $840.00.

December 17.

A check of the invoice sent to B. Lynch indicates an error in billing of $15.00, the total should have been $340.00. Mr. Hawkins asks you to send out a corrected invoice with a letter of explanation. A check is drawn for $46.00 payment of hauling charges to date. A check $1764.00 is sent to the Brockton Shoe Co. full payment of invoice of Dec. 8.

December 18.

Sold to L. Ketchum $448.00. Purchased from Brockton Shoe Co. $1740.00. Received a check $705.60 from L. Ketchum for invoice of Dec. 9 and also a check $700.70 from B. Lynch for invoice of Dec. 8. Sent our check to the Northern Fur Co. full payment of Dec. 9 invoice.

December 20.

Sundry cash sales for the week totaled $280.00. Received a check from S. Wilkes for invoice of Dec. 11.

December 21.

Sold to S. Wilkes $780.00. Purchased from Northern Fur Co. $1600.00.

December 22.

Purchased a delivery truck from the White Truck Co. total delivered price $2200.00, for which we gave a check for $700.00 and signed finance notes for the balance.

December 23.

Took out a Fire, Theft, and Public Liability Insurance policy from the Globe Insurance Co. total cost $230.00 terms net 30 days. Received a shipment and invoice from the General Supply Co.

$1600.00. Mr. Hawkins requests a $300.00 check for his personal use. Sold to F. Smith $220.00 and to A. Diebolt $540.00.

December 24.

Sent a check to the Morton Supply Co. $823.20 full payment invoice Dec. 16; purchased two new filing cabinets for cash $64.00 from Steel Equipment Co. Received a check from A. Diebolt $431.20 full payment invoice of Dec. 15. Also a check from B. Lynch for Dec. 16 invoice in full. Sent check to General Supply Co., amount $1372.00 for invoice Dec. 16.

December 27.

Sundry cash sales for the week were $240.00. Purchased from Brockton Shoe Co. $1260.00. We issued a credit memo to F. Smith for damaged goods returned $28.00.

December 28.

Sold to F. Smith $446.00. Paid express charges to date $81.00. Drew a salary check $464.00.

December 29.

Purchased from the Morton Supply Co. $915.00.

December 30.

Purchased from the General Supply Co. $1825.00. Sold to L. Ketchum $324.00.

Required:

(1) Enter transactions above in special journals as directed.
(2) Total and post all special journals.
(3) Trial balance of general ledger.
(4) Prove totals of controlling accounts with totals of subsidiary ledgers.

CHAPTER X

ACCOUNTING AT THE END OF THE FISCAL PERIOD

PURPOSE AND PLAN OF CHAPTER

In the first two chapters the importance of financial statements and their general content were studied. Now that the principal steps in the routine bookkeeping cycle have been discussed, we are ready to study the very interesting accounting work required at the close of the fiscal period to complete the bookkeeping or accounting cycle, as it is sometimes called.

In order that the student may co-ordinate the several steps required at the close of the accounting period, the material in this chapter is presented in its briefest possible form. The accounting work required at the close of the fiscal period is, of course, so important that several subsequent chapters will be devoted to a more complete and detailed study of this most interesting work. Our one purpose in this chapter is to present the student with a bird's-eye-view of what takes place in the accounting department at the close of the fiscal period.

THE BOOKKEEPING CYCLE

At this point it may be well to review the several steps in the complete bookkeeping or accounting cycle, as it is sometimes called.

1. *Journalizing.* — Recording the transactions in their respective journals.
2. *Posting.* — Procedure of transferring entries from the books of original entry to the ledger accounts.
3. *Taking a Trial Balance.* — Summarizing the ledger accounts.
4. *Adjusting the Books.* — Determining the adjustments necessary so that the accounts will reflect the correct and true conditions.

   (These are to be studied in this and subsequent chapters.)
5. *Preparing the Work Sheet.* — An accountant's device for

classifying accounts, to be used as basis for preparation of financial statements.

(To be studied in this and subsequent chapters.)

6. *Preparing the Financial Statements.*— Preparing the profit and loss statement and balance sheet from the work sheet.

   (To be studied in this and subsequent chapters.)

7. *Closing the Books.* — Recording the adjusting and closing entries in the general journal, posting these entries to the ledger. Ruling the accounts.

   (This work also will be studied in this and subsequent chapters.)

8. *Taking a Post-Closing Trial Balance.* — Procedure of testing the accuracy of closing the books.

The eight steps outlined above constitute the accounting activities that are usually repeated during each accounting period. The first three steps have already been presented, while the remaining steps are now presented one at a time in their briefest possible form, so that the entire procedure may be viewed as parts of a complete procedure. Subsequent chapters, as was stated before, will develop these steps.

THE ACCOUNTING PERIOD

The annual accounting period, or fiscal yearly period, is used in modern business for the purpose of preparing formal annual statements and the summing up of the year's business, but for managerial control the year period is far too long. The year is usually divided into a series of much shorter periods to make possible the comparison of earnings and expenses of one period with those of other similar periods. Such comparisons are valuable to the management; first, in testing the current standards with the past records, and, secondly, in formulating and inaugurating the future policy of the organization. Probably the most widely used accounting period today is the calendar month, although some progressive organizations have gone so far as to divide the year into thirteen equal periods of four weeks each. The length of the accounting period is, of course, an arbitrary matter, and each individual concern will decide in accordance with what best suits its particular needs.

NEED FOR ADJUSTMENTS

At the end of the accounting period after the last entries have been written in the journals and posted to the ledger, a trial balance is prepared. This is the starting point for the preparation of financial statements. The routine bookkeeping work for the period is concluded. During the accounting period, however, certain things have been happening for which adequate accounting records could not be conveniently kept. Despite the fact that throughout the accounting period every current transaction may have been recorded correctly and every debit and credit posted properly and, finally, an accurate trial balance prepared, the books will not show all the essential facts needed for the preparation of the Profit and Loss Statement and the Balance Sheet.

Assets have been depreciating for which a reserve will have to be calculated. The probable loss on doubtful accounts will have to be calculated as an expense to be included in the current accounting period. Therefore certain adjustment entries will have to be written and posted to the books before they reflect the companies' true financial condition. After all adjusting entries have been written, the books will be ready to be closed. At this time only one adjustment entry will be studied as an example; further adjustments, as stated before, will be taken up at length in a subsequent chapter.

ADJUSTMENT FOR MERCHANDISE INVENTORY

One very important adjustment entry which should be made at the close of each accounting period, if the financial statements prepared at that time are to reveal the true financial condition of the organization, is one which will adjust for the value of the current merchandise inventory. The trial balance taken at the close of the period will show an inventory account, but the amount listed is the value of the goods which were on hand at the start of the period. These goods probably have been sold, and more purchased. The total merchandise purchased is also listed on the trial balance, but ordinarily all of these goods will not be sold. The amount remaining unsold at the end of the accounting period should be determined, and by means of an adjusting entry placed in the inventory account as an asset.

In order to determine the value of the unsold merchandise, a physical inventory is usually taken. In brief, all stock on hand is listed and a value ascribed to each article, after which the values are totaled. Inventory-taking may be a very simple affair or a really complex proposition, depending on the type of business, size, quantity, and description of stock.

The inventory taken at the end of the account period is technically known as the closing or "New" inventory. This same inventory, after the books have been closed, automatically becomes the "Old" inventory, because at the close of the next accounting period a "New" inventory must be taken.

At this point it might be helpful to introduce an illustration to make clear what we mean by "Old" and "New" inventories.

If a man starts business with nothing but a cash investment and purchases all the merchandise he intends to sell, at the end of his first accounting period he will have only the "New" inventory and Purchases to reckon with. When the next period starts he will have on hand this stock to continue business with; he will purchase more stock, and at the close of the first period the former "New Inventory" will then be treated as the "Old" or beginning inventory, and a "New Inventory" will have to be determined. Let us illustrate these two accounting periods graphically, in statement form, showing the relation between periods and inventories:

	First Period	*Second Period*
Inventory at beginning of period, also called "Old" inventory	0.00	$ 300.00
Purchases added to stock	$1000.00	1500.00
Total available for sale	1000.00	1800.00
On hand at close of period, also called "New" inventory	300.00	650.00
Purchases consumed, or the cost of goods sold	$ 700.00	$1150.00

The value of merchandise on hand at the close of the first accounting period is $300.00, and, it will be noted, the same amount is termed "Old Inventory" at the start of the next accounting period; and so the $650.00 amount, the "New Inventory" at the close of the second period, will be the "Old Inventory" at the start of the third accounting period.

In practice the terms *Old Inventory, Beginning Inventory,*

and *Opening Inventory* are widely used to refer to the stock on hand at the start of the accounting period, while the inventory on hand at the end of the accounting period in contrast is known as *New Inventory, Ending Inventory,* or *Closing Inventory.* Of course, there is but one inventory account in the ledger; these terms just referred to simply are convenient terms used to differentiate between inventory balances at different dates. It is a very good practice to date each inventory carefully, as in accounts and on financial statements all references to inventories should be by date.

ADJUSTING ENTRY ILLUSTRATED

As an example, let us suppose the following is a trial balance taken from the books of the Dudley Furniture Company at December 31, 19—.

1. Cash	$ 2,646.45	
2. Accounts Receivable Control	13,343.60	
3. Delivery Equipment	4,500.00	
4. Land & Buildings	20,000.00	
5. Notes Receivable	2,000.00	
6. Furniture & Fixtures	2,400.00	
7. Inventory — Merchandise June 30, 19—	6,500.00	
8. Purchases	71,280.00	
9. Delivery Expense	1,630.00	
10. Salaries	2,470.00	
11. Insurance	240.00	
12. Stationery & Supplies	620.00	
13. Interest Expense	125.00	
14. Interest Income		$ 240.00
15. Accounts Payable Control		22,050.05
16. Sales		83,270.00
17. Advertising Expense	2,360.00	
18. Notes Payable		4,500.00
19. Mortgages Payable		12,000.00
20. Taxes	895.00	
21. John Dudley — Capital		8,950.00
	$131,010.05	$131,010.05

A physical inventory has been taken as of December 19— which indicates a stock of merchandise on hand valued at $8420.00.

ADJUSTMENT ENTRY FOR THE NEW INVENTORY

In adjusting and closing the books it will be convenient to make use of a temporary summary account, opened at the close of each accounting period, called the *Profit and Loss Summary.* This account is opened on the books when the New Inventory is added by the following adjusting entry:

GENERAL JOURNAL

—1—

Inventory December 31, 19—	$8420.00	
Profit and Loss Summary		$8420.00

To record the asset value of the New Inventory.

After this entry has been written, another entry transferring the *Old Inventory* to the *Profit and Loss Summary* is usually written as follows:

GENERAL JOURNAL

—2—

Profit and Loss Summary	$6500.00	
Inventory June 30, 19—		$6500.00

To transfer the cost of the *Old Inventory* to the *Profit and Loss Summary*

At this time, if we were to post the two foregoing journal entries, the *Inventory* account and the *Profit and Loss Summary* account would appear as follows:

INVENTORY

June 30	$6500.00	Dec. 31	Transferred to Profit & Loss (2)	$6500.00
Dec. 31 Adjustment (1)	8420.00			

PROFIT AND LOSS SUMMARY

Dec. 31 Old Inventory (2)	$6500.00	Dec. 31	New Inventory (1)	$8420.00

The *Inventory* account is now properly adjusted, revealing an asset balance of $8420.00. Before we go further with our closing procedure, it will be helpful to present at this point *The Accountant's Work Sheet.*

DUDLEY FURNITURE COMPANY

WORKING SHEET DECEMBER 31, 19___

Acct. No.	Name of Account	Trial Balance Dr.	Trial Balance Cr.	Adjustments Dr.	Adjustments Cr.	Profit & Loss Dr. Expense	Profit & Loss Cr. Income	Balance Sheet Dr. Assets	Balance Sheet Cr. Liability & Net Worth
1	Cash	2 646 45						2 646 45	
2	Accounts Receivable Control	13 343 60						13 343 60	
3	Delivery Equipment	4 500 00						4 500 00	
4	Land and Buildings	20 000 00						20 000 00	
5	Notes Receivable	2 000 00						2 000 00	
6	Furniture and Fixtures	2 400 00		(1)	(2)			2 400 00	
7	Inventory Merchandise June 30	6 500 00		8 420 00	6 500 00			8 420 00	
8	Purchases	71 280 00				71 280 00			
9	Delivery Expense	1 630 00				1 630 00			
10	Salaries	2 470 00				2 470 00			
11	Insurance	240 00				240 00			
12	Stationery & Supplies	620 00				620 00			
13	Interest Expense	125 00				125 00			
14	Interest Income		240 00				240 00		
15	Accounts Payable Control		22 050 05						22 050 05
16	Sales		83 270 00				83 270 00		
17	Advertising Expense	2 360 00				2 360 00			
18	Notes Payable		4 500 00						4 500 00
19	Mortgage Payable		12 000 00						12 000 00
20	Taxes	895 00				895 00			
21	John Dudley, Capital		8 950 00						8 950 00
		$131 010 05	$131 010 05						
	New Accounts			(2)	(1)				
100	Profit and Loss Summary			6 500 00	8 420 00	6 500 00	8 420 00		
				$ 14 920 00	$ 14 920 00	86 120 00	91 930 00	53 310 05	47 500 05
	Net Profit for Period					5 810 00			5 810 00
						$ 91 930 00	$ 91 930 00	$ 53 310 05	$ 53 310 05

THE ACCOUNTANT'S WORK SHEET

The form on page 158 is a device used by accountants to aid in the preparation of financial statements. By use of this form the accountant can visualize the entire process of adjusting and closing the books without reference to the general ledger. By means of distributive columns the *Profit and Loss* and *Balance Sheet* accounts are classified and the profit or loss for the period is quickly ascertainable.

The best way to understand the use of the Work Sheet is to study the form in detail. The first two money columns are reserved for the trial balance before adjustment. The next two money columns are marked *Adjustments Dr. & Cr.* These two columns are reserved for the adjustment entries. Following this are four more money columns. The first two are headed *Profit and Loss, Dr. & Cr.* while the last two are marked *Balance Sheet, Dr. & Cr.* All expense accounts are distributed to the *Expense Dr.* column, while the income accounts are placed in the next column headed *Income Cr.*

In a similar manner the *Balance Sheet* accounts are distributed to the last pair of money columns. The next to the last column is reserved for *Asset* accounts, while *Liability and Net Worth* accounts are placed in the last column to the right. If the last four money columns are added, it will be noted that the totals of two respective pairs of debit and credit columns do not agree; but a very significant fact will be noted, that the difference between each pair of columns is exactly the same. Should the credit column in the *Profit and Loss* group exceed the debit column, as is the case in our illustration, then, because income is greater than expense, a profit of $5810.00 is indicated. Similarly, in our illustration, the total of the *Asset* column exceeded the total of *Liabilities and Net Worth,* by the same amount $5810.00 indicating also a profit for the period.

PREPARATION OF FINANCIAL STATEMENTS FROM WORK SHEET

The preparation of financial statements in finished form may now be started, and with the aid of the work sheet should be comparatively simple.

THE PROFIT AND LOSS STATEMENT

The standard form of profit and loss statement similar to that studied in Chapter III is now prepared, using the information taken from the accounts listed in the *Profit and Loss* column on the work sheet.

JOHN DUDLEY

Statement of Income, Profit and Loss for the six-months period ended December 31, 19—

Income from sales		$83,270.00
Deduct the "Cost of Goods Sold":		
Merchandise Inventory June 30	$ 6,500.00	
Add Purchases	71,280.00	
Total Merchandise handled	$77,780.00	
Less Merchandise Inv. Dec. 31	8,420.00	
Cost of Goods sold		69,360.00
Gross profit on sales		$13,910.00
Deduct the General and Administrative Expenses:		
Delivery Expense	$ 1,630.00	
Salaries	2,470.00	
Insurance	240.00	
Stationery & Supplies	620.00	
Interest Expense	125.00	
Advertising Expense	2,360.00	
Taxes	895.00	
		$ 8,340.00
Net profit on trading		$ 5,570.00
Add interest income		240.00
Net profit for the period		$ 5,810.00

THE BALANCE SHEET

In a similar manner, using the accounts listed in the last two money columns, headed *Balance Sheet Dr. & Cr.*, it will be quite a simple matter to prepare a formal *Balance Sheet*.

JOHN DUDLEY

BALANCE SHEET
December 31, 19—

Assets		*Liabilities and Net Worth*		
Cash	$ 2,646.45	*Liabilities*		
Accounts Receivable	13,343.60	Accounts Payable		$22,050.05
Land and Building	20,000.00	Notes Payable		4,500.00
Delivery Equipment	4,500.00	Mortgage Payable		12,000.00
Notes Receivable	2,000.00	Total Liabilities		$38,550.05
Furniture & Fixtures	2,400.00			
Merchandise Inventory	8,420.00	*Net Worth*		
		J. Dudley, Capital June 30	$8,950.00	
		Add Profit for Period	5,810.00	
				14,760.00
	$53,310.05			$53,310.05

CLOSING THE BOOKS

After the financial statements have been prepared and copies presented to the executives interested, it will be the accountant's next duty to see that the ledger accounts are properly closed and balanced. Closing entries are entries written in the journal to transfer all expense and income account balances to the *Profit and Loss Summary* account, so that the final net profit or loss may be determined and transferred to the proprietor's capital account, or to a surplus account in case of a corporation. After the closing entries have been posted, all the nominal accounts will have been closed, and they may be ruled off and left clear for the start of the next period. At the end of the year it is a good practice to balance the asset and liability accounts, so that their balances at that time will stand out.

CLOSING ENTRIES

The *Profit and Loss Summary* account now contains a debit and a credit as a result of the adjusting entries for the merchandise inventory. Our next step will be to write an entry transferring all nominal accounts with credit balances to the *Profit and Loss Summary;* this will summarize all income. In a similar manner a compound entry will be written, transferring all expenses to the debit side of the *Profit and Loss Summary* and this

will summarize all expense for the period. The final closing entry will transfer the balance from the *Profit and Loss Summary* to the proprietor's capital account.

General Journal

Closing Entries December 31, 19—

–1–

Sales	$83,270.00	
Interest Income	240.00	
Profit and Loss Summary		$83,510.00
To close the income accounts and transfer their balances to the Profit and Loss Summary.		

–2–

Profit and Loss Summary	79,620.00	
Purchases		71,280.00
Delivery Expense		1,630.00
Salaries		2,470.00
Insurance		240.00
Stationery & Supplies		620.00
Interest Expense		125.00
Advertising Expense		2,360.00
Taxes		895.00
To close the expense accounts and transfer their balances to the Profit and Loss Summary account.		

–3–

Profit and Loss Summary	5,810.00	
John Dudley, Capital		5,810.00
To transfer the net profit for the period from the Profit and Loss Summary to Mr. John Dudley's Capital account.		

THE CLOSED LEDGER

After the entries above have been posted, all the nominal accounts should be closed, and the ledger should look as follows:

Cash — 1

Dec. 31	Balance	$ 2,646.45	

Accounts Receivable Controlling — 2

Dec. 31	Balance	$13,343.60	

Land and Buildings 3

Dec. 31	Balance	$20,000.00				

Delivery Equipment 4

Dec. 31	Balance	$ 4,500.00				

Notes Receivable 5

Dec. 31	Balance	$ 2,000.00				

Furniture and Fixtures 6

Dec. 31	Balance	$ 2,400.00				

Merchandise Inventory 7

June 30	Balance	$ 6,500.00		Dec. 31	Adjustment Entry No. 2	$ 6,500.00
Dec. 31	Adjustment Entry No. 1	$ 8,420.00				

Purchases 8

Dec. 31	Balance	$71,280.00		Dec. 31	Closing Entry 2	$71,280.00

Delivery Expenses 9

Dec. 31	Balance	$ 1,630.00		Dec. 31	Closing Entry 2	$ 1,630.00

Salaries 10

Dec. 31	Balance	$ 2,470.00		Dec. 31	Closing Entry 2	$ 2,470.00

Insurance 11

Dec. 31	Balance	$ 240.00		Dec. 31	Closing Entry 2	$ 240.00

Stationery and Supplies 12

Dec. 31	Balance	$ 620.00		Dec. 31	Closing Entry 2	$ 620.00

Interest Expense 13

Dec. 31	Balance	$ 125.00	Dec. 31	Closing Entry 2	$ 125.00

Interest Income 14

Dec. 31	Closing Entry 1	$ 240.00	Dec. 31	Balance	$ 240.00

Accounts Payable Controlling 15

			Dec. 31	Balance	$22,050.05

Sales 16

Dec. 31	Closing Entry No. 1	$83,270.00	Dec. 31	Total	$83,270.00
		$83,270.00			$83,270.00

Advertising Expense 17

Dec. 31	Balance	$ 2,360.00	Dec. 31	Closing Entry No. 2	$ 2,360.00

Notes Payable 18

			Dec. 31	Balance	$ 4,500.00

Mortgage Payable 19

			Dec. 31	Balance	$12,000.00

Taxes 20

Dec. 31	Balance	$ 895.00	Dec. 31	Closing Entry No. 2	$ 895.00

John Dudley, Capital 21

			Dec. 31	Balance	$ 8,950.00
			Dec. 31	Closing Entry No. 3	5,810.00

PROFIT AND LOSS SUMMARY 22

Dec. 31	Merchandise Inventory Adjustment No. 2	$ 6,500.00	Dec. 31	Merchandise Inventory Adjustment No. 1	$ 8,420.00
	Closing Entry No. 2	$79,620.00		Closing Entry No. 1	$83,510.00
	Closing Entry No. 3	$ 5,810.00			
		$91,930.00			$91,930 00

POST CLOSING TRIAL BALANCE

After the books have been closed as a check of the accuracy of the work, a trial balance after closing is taken as the concluding step.

The following is a trial balance taken from the general ledger above after all closing entries have been posted:

JOHN DUDLEY FURNITURE CO.

Post Closing Trial Balance

Cash	1	$ 2,646.45	
Accts. Receivable Control	2	13,343.60	
Land & Buildings	3	20,000.00	
Delivery Equipment	4	4,500.00	
Notes Receivable	5	2,000.00	
Furniture & Fixtures	6	2,400.00	
Mdse. Inventory, Dec. 31, 19—	7	8,420.00	
Accounts Payable Control	15		$22,050.05
Notes Payable	18		4,500.00
Mortgage Payable	19		12,000.00
J. Dudley, Capital	21		14,760.00
		$53,310.05	$53,310.05

QUESTIONS ON THE CHAPTER

1. (*a*) What is an adjustment entry?
(*b*) Why are adjustments required?
2. Explain how a physical inventory is taken.
3. Differentiate between the "*Old*" and "*New*" inventories.
4. List and briefly describe the eight steps in the bookkeeping or accounting cycle.
5. What is the purpose of the accountant's work sheet?
6. Give a brief description of the work sheet.
7. Explain in a series of steps how each pair of columns functions.
8. (*a*) Should the debit column exceed the credit column in the Profit and Loss group, what will be the result, a profit or a loss?

(*b*) If this condition exists, then which column should be greater in the *Balance Sheet* group?

9. Explain how the profit and loss statement may be drawn from the completed work sheet.

10. Explain the preparation of a balance sheet from a completed work sheet.

11. What are closing entries?

12. Explain closing the books by 3 journal entries.

13. What is an *After Closing Trial Balance?*

PROBLEM MATERIAL

Problem 1

The following trial balance was taken from the books of G. Evans at December 31, 19—.

G. Evans — Trial Balance

As of December 31, 19—

Cash	$ 3,240.60	
Accounts Receivable	16,090.54	
Notes Receivable	3,600.00	
Inventory Jan. 1, 19—	24,820.00	
Notes Payable		4,400.00
Interest Expense	240.00	
Interest Earned		186.00
Purchases	62,971.60	
Sales		92,990.00
Purchase Returns & Allowances		845.00
Sales Returns & Allowances	263.00	
Rent	1,200.00	
Insurance	840.00	
Advertising	2,400.00	
Salesmen's Salaries	6,000.00	
General Office Salaries	8,000.00	
Office Equipment	410.00	
Accounts Payable		18,964.00
General Expense	124.46	
G. Evans, Capital		12,815.20
	$130,200.20	$130,200.20

Adjustment Data:

A physical inventory of the merchandise was taken which revealed a total of $22,740.00.

Required:

(1) Prepare an accountant's work sheet similar to the form illustrated in Chapter X.

(2) From the completed work sheet prepare a profit and loss statement, and a balance sheet.
(3) Write the journal entries necessary to adjust and close the books.

Problem 2

The following trial balance was taken from the books of W. C. Hogan at December 31, 19—.

W. C. Hogan — Trial Balance

As of December 31, 19—.

1. Accounts Payable		$ 20,579.00
2. Accounts Receivable	$ 35,450.00	
3. Advertising	1,623.00	
4. Buildings	70,000.00	
5. Cash	23,585.00	
6. Delivery Equipment	10,000.00	
7. Salesmen's Salaries	13,090.00	
8. Insurance Expense	1,065.00	
9. Interest Earned		1,185.00
10. Interest Expense	3,844.00	
11. Land	33,000.00	
12. W. C. Hogan Capital		150,000.00
13. Merchandise Inventory Jan. 1	65,770.00	
14. Machinery & Equipment	21,350.00	
15. Mortgage Payable		50,000.00
16. Notes Payable		60,000.00
17. Notes Receivable	14,270.00	
18. Purchases	211,600.00	
19. Sales		242,961.00
20. Taxes	1,530.00	
21. General Office Salaries	18,548.00	
	$524,725.00	$524,725.00

Adjustment Data:
An inventory has been taken which amounts to $84,610.00.

Required:
(1) Prepare an accountant's work sheet similar to the form illustrated in Chapter X.
(2) From the completed work sheet prepare a profit and loss statement and a balance sheet.
(3) Write the journal entries necessary to adjust and close the books.

CHAPTER XI

ACCOUNTING AT THE END OF THE FISCAL PERIOD (Continued)

ADJUSTMENTS FOR DEPRECIATION, DEPLETION AND BAD DEBTS

In the last chapter a brief description of the work done at the close of the accounting period was presented. At that time the only adjustments studied were the entries necessary to adjust the inventory account, particularly, for the New Inventory. Now it is our purpose to present further adjustments required at the end of the fiscal period. These adjustments are to be presented rather thoroughly, with as much detail as is necessary to give the student a good idea of the need for the particular adjustment, the purpose served by the adjustment, and the mechanics required for each adjustment, together with ample illustrative material.

DEPRECIATION: WHAT IT IS AND FACTORS CAUSING IT

One real difference between an expense and an asset is the rapidity with which the item will be consumed in the operation of the business. The account *Fuel,* is considered an expense because it is consumed in operation almost immediately, just as an expenditure for electric power would be. An auto truck, on the other hand, is considered an asset because it has a relatively longer life. It is consumed in the operation of the business, however, just as surely as is the fuel which drives the machinery. The only difference is that the truck may last five years as against practically immediate consumption of fuel, coal, oil, gas, or electricity.

The price paid for the auto truck is in reality an expenditure made for transportation service rather than for a physical object. Similarly, every dollar spent for a machine or any other piece of plant equipment is an outlay for service expected from the machine. Each piece of machinery will have a definite service capacity and every operation performed by the machine will reduce the life of that machine.

Wear and tear is one of the principal factors of depreciation, particularly for an asset in continual operation. Wear and tear, however, usually measures the maximum life which may be expected from a fixed asset. Deterioration, rust, and rot may cause severe damage to property, therefore the action of the elements may be a very important factor in shortening the expected life. Accidents and sabotage are also factors affecting the life of assets, but these factors are unusual and are not ordinarily considered when depreciation calculations are made. Obsolescence is another factor, and sometimes a most important one in shortening the expected life of fixed assets. A machine which has an expected life of ten years may have to be replaced long before this period has elapsed because another similar machine has been invented and made available which will double the capacity of the old machine. It may therefore be uneconomical to continue the old machine, and its replacement will not be due to wear and tear or to the action of the elements, but rather to obsolescence. Obsolescence, accidental damage, and sabotage factors in reducing the ordinary expected life of a fixed asset are usually disregarded when calculating depreciation.

DEPRECIATION DEFINED

Depreciation may be briefly defined as the gradual reduction in value which takes place in fixed assets, due usually to wear and tear and the action of the elements. These combined factors tend to reduce the service capacity of the asset and the amount of this reduction is spoken of in accounting as depreciation.

PURPOSES OF ACCOUNTING FOR DEPRECIATION

In the last chapter it was stated that adjustment entries were required so that the books might reflect the true financial condition of the organization. In keeping with this purpose it will be necessary for every business owning fixed assets properly to account for depreciation. One good reason for accounting for depreciation is that the cost of the fixed asset may be spread evenly over the periods benefiting by the use of the fixed asset, until finally the total cost of the asset has been charged to operations. Another reason for keeping accounting records for

depreciation is that the reader of a balance sheet may see that depreciation has been provided for and that the fixed assets are exhibited at their depreciated values.

ACCOUNTING FOR DEPRECIATION

In order that the balance sheet may properly display the original cost of a fixed asset and at the same time exhibit the depreciated values, it will be necessary to maintain two accounts for each fixed asset. In one account all the facts regarding cost of the fixed assets will be gathered, such as the invoice price, express and cartage necessary to get the asset, and any incidental costs required to put the machine in full operating condition.

A second account which must be maintained for balance sheet purposes is most widely known in accounting parlance as a *Reserve for Depreciation.* Thus it is that we maintain, beside the fixed asset accounts such as *Machinery and Equipment, Delivery Equipment*, companion reserve accounts, as *Reserve for Depreciation of Machinery* and *Reserve for Depreciation of Delivery Equipment.* Each asset subject to depreciation is therefore represented on the balance sheet by two accounts.

In the Profit and Loss statement it will be equally important that the expense of depreciation be listed together with all other expenses of operation. This expense is usually recorded in depreciation accounts, such as *Depreciation of Machinery, Depreciation of Delivery Equipment,* and so forth.

BASES FOR COMPUTING DEPRECIATION

Many bases for computing depreciation have been and are in use today. Each method has the same general purpose, to apportion the cost of service received over the economic life of the asset being depreciated. The cost of this service is the difference between the original cost less any recovery made from the final disposal of the asset, " scrap value " or " turn in value." In the case of automobiles and certain machines, " turned in " before all their usable life has been consumed in operations of the business, this residual value is important and must be accounted for. On the other hand, with most other fixed assets, because it is so difficult to estimate the probable scrap value to

be received at the time of retirement of the fixed asset, and because the amount is usually very small and the costs of demolishing or removal often will equal the scrap value, this amount is disregarded in actual practice.

STRAIGHT LINE METHOD

Probably without a doubt the most widely used method of determining the periodic depreciation in use today is the so-called straight line method. This is the most simple and most easily used method. It spreads the cost of depreciation equally over each accounting period. The calculation in brief takes the total depreciation, which is the cost of the asset less any residual value as described before, and divides this amount equally by the time length of the accounting period. Thus, for example, let us assume, an auto truck cost a contractor $3500.00 delivered and ready for service, and after a three-year life the truck is estimated to have a turn-in value of $500.00. The total depreciation would be $3000.00, and the annual depreciation would be $1000.00.

In formula this would be:

$$\frac{\text{Cost} - \text{turn-in or scrap value}}{\text{Life in years}} = \text{Annual depreciation cost.}$$

And applied to our illustrative case:

$$\frac{\$3500.00 - \$500.00}{3 \text{ yrs.}} = \$1000.00 \text{ per year.}$$

If depreciation for one month is desired it will be necessary only to divide the annual amount by twelve.

OTHER BASES FOR COMPUTING DEPRECIATION

Perhaps the most theoretically sound basis of computing depreciation is a charge based on production. Under this method a machine's productive capacity must be calculated or estimated in units of production as so many yards, tons, stampings, or other convenient measurements which it is expected the machine will yield during its economic life. The total depreciation (cost minus scrap value) is then used as the numerator and the

number of units as the denominator. The result will be the unit cost of depreciation. In formula

$$\frac{\text{Cost} - \text{scrap value}}{\text{Units}} = \text{Unit cost of depreciation.}$$

For example, let us suppose that a machine cost \$650.00 and has an estimated scrap value of \$50.00, and that in its life it is estimated the machine will turn out 6,000,000 units; then the per unit cost will be \$.0001 or ten cents per thousand units produced.

This method will work satisfactorily where production is uniform; but, in practice, with the unevenness of the business cycle, and the loss in service capacity which goes on during idle periods (which often is greater than in periods of service), and other similar difficulties, this method is not widely used.

There are other methods used to apportion the cost of depreciation, and a great deal more could be said regarding the theory of depreciation, but this subject is rightfully reserved for a more advanced text.

The only problem which concerns us, at present, is that each period should be charged with a share of the total depreciation of all assets which are subject to depreciation, because we wish every financial statement to reflect the true financial condition of the business. This can be done only if all costs are included in our statements.

CASE FOR DEPRECIATION: STRAIGHT LINE METHOD

Suppose a contractor purchased a truck in January of 1938 for \$3500.00, which after a three-year life would have an estimated turn-in value of \$500.00. The total depreciation under these circumstances would be \$3000.00.

At December 31st, 1938, the end of the first year, an adjusting journal entry would be written debiting *Depreciation of Auto Truck* and crediting *Reserve for Depreciation of Auto Truck* accounts in amount of \$1000.00, the annual depreciation. The *Depreciation* account, an expense, would be closed at the same time, together with all other expense accounts, to the *Profit and Loss Summary* account. The same procedure would be followed at the close of 1939 and 1940 with the following result in the ledger:

DEPRECIATION OF AUTO TRUCK

1938	Adjustment	$1000.00	1938	Closed to P. & L.	$1000 00
1939	Adjustment	1000 00	1939	Closed to P. & L.	1000 00
1940	Adjustment	1000 00	1940	Closed to P. & L.	1000 00

RESERVE FOR DEPRECIATION OF AUTO TRUCK

		1938	$1000 00
		1939	1000.00
		1940	1000.00

It will be noted that the *Profit and Loss Summary* account absorbed the estimated depreciation annually, while at the same time the *Reserve* account was built up to $3000.00.

The asset account *Auto Truck* has, all the while, had a debit balance of $3500.00. The net effect of the adjustment has been to apportion the loss due to wear and tear to the three years which enjoyed the use of the truck.

Continuing our example, suppose that in 1941 another truck is purchased for $2800.00, and that we pay $1000.00 in cash, give a series of notes totaling $1300.00, and are allowed $500.00 for the old truck. The following journal entries should be written:

Auto Truck	$2800.00	
Cash		$1000.00
Notes Payable		1300.00
Auto Truck		500.00
To record purchase of new truck - allowance on old truck $500.00 — cash $1000.00. - notes $1300.00.		

Reserve for Depreciation of Auto Truck	$3000.00	
Auto Truck		$3000.00
To close the reserve account to Auto Truck account.		

To complete our case let us see the effect of these entries on the asset and reserve accounts.

Auto Truck

1938	$3500.00	1941	Allowance	$ 500.00
1941	2800.00	1941	Reserve	3000.00

Reserve for Depreciation of Auto Truck

Jan.			Dec.	
1941	Closed to		1938	$1000.00
	Auto Truck	$3000.00	1939	1000.00
			1940	1000 00
		$3000.00		$3000 00

It will be observed that maintaining the reserve account spreads the depreciation loss over the life of the asset.

REPLACEMENT OF ASSETS: INSUFFICIENT DEPRECIATION

The question often arises as to what happens if an asset has to be replaced at a figure less than its depreciated book value. The easiest way to answer this question is to illustrate with a typical case.

Let us assume that, among its trucks, the American Trucking Company Inc. had truck No. 5 which was purchased in January of 1937 for $3600.00. The truck was expected to give four years of service, after which it would be turned in for an estimated allowance of $400.00 toward a replacement truck. For three years a depreciation reserve account has been maintained with an annual credit of $800.00 and now has a total credit balance of $2400.00. On June 30, 1940, the truck has to be replaced, and the best allowance toward the purchase of a new truck is $550.00.

Under these circumstances the following entries may be written:

—1—

Depreciation of trucks	400.00	
Reserve for Depreciation of Trucks		400.00
To charge the current period with one-half year depreciation.		

—2—

Reserved for Depreciation of Trucks	2800.00	
Auto Truck		2800.00
To close the reserve balance to the asset account.		

At this point it will be evident that the Auto Truck has a present book value of $800.00 (cost $3600.00 less depreciation to date of $2800.00). As the truck was traded for only $550.00, there is a loss of $250.00 on the transaction. This loss may not be taken as a deduction on the income tax return, but will have to be closed directly to the surplus account of the corporation. The following accounts will conclude the illustration.

AUTO TRUCK NO. 5

Jan. 1937	total cost	3600 00	June 1940	allowance	550 00
			June 1940	reserve	2800 00
			June 1940	loss on trade	250 00
		3600 00			3600 00

RESERVE FOR DEPRECIATION OF AUTO TRUCK

			Dec. 1937	1 yr dep.	800 00
			Dec 1938	1 yr dep.	800 00
			Dec 1939	1 yr dep.	800.00
June 1940	closed to truck account	2800 00	June 1940	½ yr. dep.	400.00
		2800.00			2800.00

SURPLUS

June 1940	loss on trade truck No. 5	250 00			

CASE OF OVER-DEPRECIATION

In this connection let us suppose that the American Trucking Company Inc., had another similar case and that, when the truck is traded at the end of the fourth year, the company's allowance is $500.00 for the old truck. Under these circumstances, without illustrating the accounts, it will be apparent that there has been a gain of $100.00. This gain on the disposal of

a fixed asset will have to be reported as additional income on the income tax return.

RATES FOR DEPRECIATION AND THEIR DETERMINATION

The rates of depreciation should be such as will recover the cost or other applicable basis less the ultimate salvage value over the estimated period of life of the asset. The rate depends solely upon the facts in each case as to the probable useful life of the property. Consideration must be given to the character of the property, its location, surroundings, actual use, extent of operations, and effect of repairs.

Trucks in one business may call for a rate of 50%, in another for a rate of 20% per annum. A building located near an elevated or surface railroad track may depreciate faster than one not subject to vibration. Office equipment may last twenty years in some cases, and in others be exhausted quickly. Thus each taxpayer will have to show the facts necessary to prove the rate in his particular case. Due regard must be given to upkeep policy. If a company makes a practice of repairing its property or machinery or replacing minor parts, it is only natural to conclude that depreciation will be slower than if repairs are neglected. In the textile business, for example, loom fixers are continually at work keeping the machinery in running order. This gives a company a heavy deduction for repairs, and the depreciation rate therefore should be lower than otherwise. Property which is second-hand when purchased will require a higher rate.

Example: A building subject to a 2% rate (50-year life) may be purchased when 30 years old. Its cost should be depreciated at a 5% rate based on the remaining 20 years of life.

CHANGING THE RATE

The depreciation rate fixed is not unalterable. If it can be demonstrated that the probable useful life of the investment is shorter or longer than that already determined, the rate applicable to future years will be adjusted in the light of such

* This and the matter on page 177 and the first paragraph on page 178 is from: Alexander Federal Tax Course, Alexander Publishing Co. Inc.

evidence. Extra rates of depreciation may be allowed for a particular period or year. Thus, if a company operated overtime or double time for an extended period, an increase, particularly for machinery, may be allowed. An extra rate may be allowed if goods, coarser than those originally intended for machinery, are being manufactured. An extra rate may be allowed if unskilled labor operates machinery for an extended period. The facts are determinative in all such cases.

If the improvements are added to property, they are likewise subject to depreciation. If the improvements will expire with the original property, they may be depreciated at a greater rate than ordinarily allowed. If an expensive rubber roller is added to a bleaching machine, and it will be of no use after the machine is exhausted through wear and tear, it should be depreciated over the balance of the useful life of the bleaching machine. However, a taxpayer is not permitted under the law to take advantage in later years of an earlier failure to claim a depreciation allowance or his action in taking an allowance plainly inadequate under the known facts in prior years.

Example: A building with a reasonable estimated life of 33⅓ years is depreciated at a rate of 2% for 20 years. The owner, claiming a 3% rate as the proper one at the end of the 20-year period, will be allowed a 3% rate for the remaining 13⅓ years of the building's estimated life. The balance for prior years not deducted may not be spread over the remaining years as an extra allowance.

Until 1934 the burden of proof as to unreasonableness of depreciation deduction was on the Government. Since that year, however, the burden has been on the taxpayer.

The Treasury Department has issued two different schedules, one of five columns and another of fourteen columns, calling for certain data, the information requested therein being self-explanatory. For those interested, these schedules should be obtained from the Treasury Department and studied. They call briefly for the following: cost, or other basis, proof of estimated useful future life, segregation of similar assets having the same average life, list of charges against reserves, repair, renewal or upkeep policy, list of losses of discarded items, and unusual charges due to casualty, obsolescence, or sale of substantial amounts of depreciable property.

REPLACEMENT

Amounts expended for replacements or renewals of a permanent nature should be charged directly to the property account, or if a reserve for depreciation is maintained in the books, the amounts should be charged to such reserve. What constitutes a replacement is not capable of categorical definition. Good accounting practice should be followed. In general, however, it refers to larger changes which are made occasionally as opposed to incidental repairs which are made regularly, do not appreciably prolong the life of the property, and are deductible as business expense. The relining of blast furnaces has been held a replacement properly chargeable against the depreciation reserve, whereas the substitution of a valve or a piece of pipe would constitute an incidental repair.

DEPRECIATION RESERVES ON THE BALANCE SHEET

Depreciation Reserve accounts are evaluation accounts, as explained before. They are created and added to periodically to measure the accumulated depreciation which has taken place in the fixed asset. The accumulated amount in the Reserve account subtracted from the cost of the asset should exhibit the depreciated value of the asset. Reserve accounts have credit balances, but are neither liabilities not true net worth accounts. They are really asset offset accounts, and for classification should be shown as parts of the assets they offset. It is a good practice, and in conformity with sound theory to show these valuation accounts on the balance sheet as deductions from the accounts for which they were created, thus:

Delivery Equipment	$17,000.00	
Less: Reserve for depreciation .	6,000.00	
		$11,000.00

DEPLETION

Depreciation and depletion are quite closely related. Depletion may be briefly defined as the gradual reduction in value of a natural resource due to the extraction or use of its product. Some organizations have assets belonging to the family of natural resources such as coal mines, oil wells, stone quarries, metal

mines, clay banks, or timber lands. These fixed assets are subject to depletion and in accounting are frequently referred to as wasting assets. Companies organized to work with assets of this character should make proper provision for the replacement of the asset when it becomes exhausted.

The cost of depletion should be absorbed in current operations, just as much as depreciation, salaries, or any other expense. If this cost be ignored, costs will be understated and profits incorrectly reported; with the result that net worth will be overstated. Mines, oil wells, and timber lands are purchased on the basis of the value of their ultimate yield in coal, ore, oil, or lumber, and as each ton of coal or mineral, or board foot of lumber, or barrel of crude oil is taken from the property, its ultimate value is lessened. Depletion is a very important problem of exhaustive industries.

ADJUSTMENT ENTRIES FOR DEPLETION

The problem of calculating the proper amount which should be charged to each period depends upon and varies with the industry. Each extractive industry, or manufacturing industry utilizing the product of a natural resource will have to work out its own problem. Regardless of the difficulties of computing the correct amount, the important point to observe is that depletion be included in the costs.

The treatment of depletion varies so much with the different industries that only the principles involved in recording allowance for depletion will be illustrated for one industry.

DEPLETION OF TIMBER LANDS

Just as the removal of a ton of coal or ore reduces by so much the value of a mine, so the cutting of each thousand board feet of lumber depletes the value of the timber land. It should be quite obvious that some method of writing off the cost of timber lands should be adopted. Quite frequently stumped or cut-over land has little or no value; therefore, the entire cost of the property will often be charged to production, and to each thousand feet of lumber must be added so many cents for depletion expense.

Each industry must calculate for itself what this proper charge

shall be, and production costs must bear this expense. Each industry will employ engineers who can furnish the accountant the information required for accurately computing this cost. The Treasury Department, which employs its own engineers for this purpose, will allow or disallow such deductions *when taken on income tax returns,* depending upon the reasonableness of the charge.

ADJUSTMENT FOR ESTIMATED LOSS ON BAD DEBTS

There is probably no business organization today that can boast of one hundred per cent collection of its accounts receivable. There are many organizations which maintain extensive credit departments, and attempt to keep down their credit losses by adopting very stiff credit policies, but even these organizations cannot prevent some loss from bad debts. This loss can be estimated from past experience, and adequate provision for doubtful accounts should be made.

In a long established business having fairly consistent sales the loss may be measured in terms of a certain percentage of sales. This method is in use in actual practice, but a more reliable method of calculating the probable loss on bad debts is one based on the accounts themselves. By use of this method the accountant " ages " each account. A form is prepared on which each balance is classed as column No. 1 " accounts not yet due," column No. 2 " accounts 30 to 60 days," column 3 " accounts 61 to 90 days," column 4 " accounts 3 to 6 months old," or column 5 " accounts 6 months to 1 year. Then follows a sixth, and usually last, money column for " old accounts." Into this column will be entered all old accounts and directly following will be a space provided for " comments." In this latter space some comment will be written for each old account. An experienced accountant familiar with his client's collection policy and past experience with each group of accounts can readily set rates for the several columns. When these rates have been applied to the totals of each column and the results added, the total amount of the probable loss will be available. When this amount is known, the then existing reserve may be deducted and the difference will measure the loss chargeable to the current period. This method is more reliable than basing the probable expense on sales, because current conditions may change and abnormal

conditions, such as follow after a war, or a depression period make the evaluation of the accounts themselves a more reliable basis.

In problem work it is not feasible to ask the beginning student to "age" accounts in order to arrive at the proper allowance for doubtful accounts; therefore, in all problem material, an arbitrary percentage of accounts receivable shall be stated, as "Provide 2% of accounts receivable, for doubtful accounts."

JOURNAL ENTRY FOR DOUBTFUL ACCOUNTS

When the amount to be set up as a reserve or the current addition to the reserve has been calculated as described above, the following adjusting journal entry should be written.

Bad Debt Expense	$.	
Reserve for Doubtful Accounts . . .		$. . . . . .
To charge the current period with the probable loss on bad debts.		

If this entry has established a new reserve account, then each subsequent entry will be made to increase the reserve. If the reserve has been established then the above entry would simply add the current addition to the reserve.

FUNCTION OF THE RESERVE ACCOUNT

As accounts are determined to be worthless they should be charged against the reserve and the customer's account closed, as in the following journal entry.

Reserve for Doubtful Accounts	$60.00	
John H. Smith		$60.00
To close account with John H. Smith. Customer is bankrupt.		

This entry will reduce the amount of the reserve and, should the bad debt losses actually go beyond the amount of the reserve, then, of course, the reserve has been inadequate and subsequent charges will have to be more liberal. On the other hand, there is no use allowing this reserve to be built up out of all proportion to the actual accounts being evaluated. As a matter of fact, the federal income tax officials would soon check up on that situation, because they permit only a "reasonable allowance" for bad debts, as for depreciation.

SUMMARY ILLUSTRATION

In the next chapter further adjustments for accrued and deferred items are studied, after which a complete case illustrating adjusting and closing the books is presented. The illustration includes an improved and usable Accountants' Work Sheet, which the student may find helpful in solving the problems of this chapter.

QUESTIONS ON THE CHAPTER

1. What is depreciation?
2. Define obsolescence.
3. How is depreciation calculated? Give an example.
4. Explain the difference between increasing a reserve and creating a reserve.
5. Explain depletion.
6. Is depreciation an expense?
7. What do you understand by *Reserve for Doubtful Accounts?*
8. Explain aging accounts.
9. (*a*) Write the journal entry required to set up a *Reserve for Doubtful Accounts,* amount $1000.00.

   (*b*) Presume one account "Mr. H. Smith" has been declared worthless in the amount of $200.00. Write the journal entry to charge it off.
10. Why are reserves for obsolescence usually not set up?

PROBLEM MATERIAL

Problem 1

The following trial balance was taken from the books of Mr. R. Holmes as of November 30.

Trial Balance Nov. 30, 19—

1. Cash	$ 3,846.18	
2. Notes Receivable	2,400.00	
3. Accounts Receivable	36,420.19	
4. Reserve for Doubtful Accounts		$ 312.40
5. Land	3,000 00	
6. Buildings	26,000.00	
7. Reserve for Dep. of Bldgs.		2,860.00
8. Notes Payable		4,000.00
9. Accounts Payable		22,480.72
10. Purchases	85,960.75	
11. Sales		102,840.60
12. Purchase Returns		418.00
13. Sales Returns	726.40	
14. Rental Income		600.00
15. Taxes	320.00	
16. Advertising	1,600 00	
17. Insurance	240 00	
18. Salesmen's Salaries	4,500 00	
19. Automobile Equipt.	4,200.00	
20. Res. for Dep. of Auto Equipt.		840.00
21. General Office Salaries	2,600.00	
22. Inventory May 31	16,428.60	
23. Mortgage Payable		10,000.00
24. Interest Expense	324.00	
25. Interest Income		38.60
26. R. Holmes Capital		47,058.40
27. Travel Expense	1,264.00	
28. General Expense	418 60	
29. Machinery	1,200.00	
	$191,448.72	$191,448.72

Adjustment Data:

1. The Merchandise Inventory at November 30 is valued at $18,240.72.
2. Add 1% of the Accounts Receivable to the Reserve for Doubtful Accounts.
3. The annual allowance for depreciation of Buildings is 2%. Provide for the current period.
4. The depreciation allowance for the Automobile Equipment is calculated to be $540.00 for the current period.
5. The Machinery was purchased June 1st and it is estimated that the turn-in value will be $200.00 after a 5-year life. Provide proper depreciation for the period.

Required:

(1) Given the above trial balance and adjustment data, prepare an accountant's work sheet. (Use form illustrated in Chapter XII.)

(2) From the completed work sheet prepare a profit and loss statement, and a balance sheet.

(3) Write the journal entries necessary to adjust and close the books.

PROBLEM 2

The following trial balance was taken from the books of Mr. J. Brynes, at June 30, 19—.

Sales		$424,418.60
Return Sales & Allowances	$ 1,416.00	
Purchases	382,965.00	
Return Purchases & Allowances		1,872.45
Cash	17,910.82	
Accounts Receivable	184,317.19	
Reserve for Doubtful Accounts		2,416.06
Notes Receivable	3,600.00	
Land	7,000.00	
Buildings	80,000.00	
Machinery & Equipment	64,000.00	
Office Equipment	2,400.00	
Reserve for Dep. of Buildings		26,800.00
Reserve for Dep. of Mach. & Equipt.		16,400.00
Reserve for Dep. of Office Equipt.		720.00
Inventory Jan. 1	40,412.84	
Taxes	3,600.00	
Rental Income		1,200.00
Interest Expense	1,286.40	
Interest Income		129.00
Mortgages Payable		140,000.00
Notes Payable		26,400.00
Advertising	6,000.00	
Salesmen's Salaries	6,000.00	
Accounts Payable		112,210.90
J. Brynes Capital		58,342.48
J. Brynes Drawings	1,200.00	
General Expense	121.24	
General Office Salaries	8,480.00	
Petty Cash Fund	200.00	
	$810,909.49	$810,909.49

Adjustment Data:

1. The Merchandise Inventory is valued at $32,816.00.
2. One account is worthless, the company is bankrupt, and Mr. Brynes agrees to it being charged off, to the amount of $610.00.
3. Your study of the Accounts Receivable indicates that a reserve of $2410.00 will be required. Increase the reserve accordingly.

4. Increase the Reserve for Depreciation of Buildings 1
5. Increase the Reserve for Depreciation of Machinery 5
6. Increase the Reserve for Depreciation of Office Equipment $60.00.

Required:
(1) An accountant's work sheet.
(2) A profit and loss statement and a balance sheet.

PROBLEM 3

(*a*) Mr. Jacobs has Accounts Receivable of $20,600.00 and a Reserve for Doubtful Accounts of $1100.00. He has just been informed that an account in the amount of $600.00 is worthless, and instructs you to write it off. You are then to write an adjustment which will bring the Reserve for Doubtful Accounts up to 5% of the balance of Accounts Receivable.

Required: The journal entries required to close the account and adjust the reserve.

(*b*) AUTO TRUCK

Jan. 1937	4500.00		

RESERVE FOR DEPRECIATION OF AUTO TRUCK

		Dec. 1937	1000.00
		Dec. 1938	1000.00
		Dec. 1939	1000.00

The two accounts above appear on the books of the Troy Machine Co. At January, 1940, the Troy Machine Company buys a new truck, which is to replace the old one. The cost of the new truck is $3600.00. The Champion Truck Co. will allow the Troy Machine Co. $800.00 for the old truck and accept a check for $1300.00 and finance notes for the balance.

Required:
(1) The journal entry for the purchase of the new truck.
(2) The journal entry or entries to clear the old truck from the books.
(3) Rule the *Asset* and *Reserve* accounts and post the journal entries.

Problem 4

The Monroe Machine Company has just purchased a new machine, which cost $4500.00, delivered and installed. The company engineer expects the machine to be used regularly day in and day out and to last only four years, after which it will be turned in for an agreed allowance of $500.00.

(*a*) Using the straight-line method, set up a schedule of depreciation for the new machine.

(*b*) Using the units of production method, assuming the machine is expected to turn out four million units before being turned in, compute the rate per thousand units produced. Assume further that, for the year just ended, the company has produced 860,000 units. How much should be charged for depreciation?

Problem 5

Assume that the machine mentioned in Problem 4 has been in service for four years, and using the straight line method of depreciation a proper reserve has been accumulated.

(*a*) Prepare accounts for the *Reserve* and *Depreciation,* showing the entries for four years.

(*b*) Assume that the Monroe Machine Company at the end of the fourth year has an offer to trade in the old machine for a similar new machine. The new machine, however, is to cost $5000.00; the seller will allow the Monroe Machine Company $750.00 for the old machine, accept $3000.00 in finance notes and a check for the balance.

Write the journal entries required to clear the old machine from the books and for the purchase of the new machine.

CHAPTER XII

ACCOUNTING AT THE END OF THE FISCAL PERIOD (Continued)

ADJUSTMENTS FOR ACCRUED AND DEFERRED ITEMS

The last chapter presented adjustments required for depreciation and doubtful accounts. This chapter continues the study of adjustments with a treatment of the adjustments required for accrued and deferred items.

BOOKS KEPT ON THE CASH BASIS

Books may be kept either on the " cash basis " or on the " accrual basis." When books are kept in such a way that entries for expense and income are made only when cash is actually disbursed or received, they are said to be kept on the cash basis.

If books are kept on a strictly cash basis it will not be possible to prepare truly correct financial statements. The only way possible for a set of books kept on a strictly cash basis to yield true financial statements would be to have all expenses applicable to the period paid within the period, and all income earned in the period actually received in cash or its equivalent, and at the same time to be certain that no income was received in advance. Such a system could hardly be found in modern business. We must therefore conclude that where books are kept on a strict cash basis, any financial statements prepared cannot hope to portray the true state of affairs. Just as soon as proper adjustments are made; (*a*) to provide for expenses which apply to the current period, but which have not been recorded because the cash was not actually disbursed; (*b*) to bring onto the books income earned in the current period, but not recorded because the cash was not actually received; (c) to defer to future periods the amount expended for expense items which will benefit future periods, and (*d*) to defer similarly income collected in the current period if part of that income rightfully belongs to a subsequent period, then the system of account keeping is said to be on the *accrual* basis.

The accrual basis of acount keeping is not a completely different system, but rather simply a modification of the records by means of certain adjustment entries written at the end of the accounting period. These entries are written to bring onto the books all income earned in the period, and at the same time by proper adjustment record all expense applicable to the period.

ADJUSTMENTS REQUIRED

To illustrate why it is necessary to adjust the books, and to show how these adjustments should be written, let us now study the four types of adjustments usually required.

GROUP I

ADJUSTMENTS FOR ACCRUED EXPENSES AND CORRESPONDING ACCRUED LIABILITY

Case No. 1

Suppose that Mr. Phillip Smith keeps his records on the cash basis, and at the end of the year has his books closed and statements prepared by a public accountant; that on the trial balance the *Salaries and Wages* account shows a balance of $6472.00. Upon examination of the account it is found that the last amount paid Tuesday, December 29, covered the weekly salary to and including December 26.

Criticism

If an adjustment entry is not written, and the books closed in their present condition, the year's expenses will be understated by the amount earned by the workers from the 28th through the 31st, which should be included in the expenses of the current period, if true and correct financial statements are desired.

Adjustment

From time cards it is determined that there is due the workers exactly $720.00 for the period in question. The following adjustment will add this amount to the Salaries and Wages account, and at the same time record the company's liability for unpaid wages.

Salaries & Wages	$720.00	
Wages Payable		$720.00
To record the accrued wages Dec. 28 to 31 inclusive as an expense and to record the corresponding liability for unpaid salaries and wages.		

Conclusion

After this entry has been written and posted, the *Salaries and Wages* account will appear as follows:

SALARIES & WAGES

Weekly pay dates, for year listed here (with detail of weekly pay-rolls omitted to save space) but the total actually paid would be	$6472.00		
Adjustment:			
Dec. 31			
For Dec. 28–31	720.00		
Total wages for year	$7192.00		

WAGES PAYABLE

		Dec. 31, Adjustment Pay Roll Dec. 28–31	$720.00

The *Salaries and Wages* account is now ready to be closed, together with all other expenses to the *Profit and Loss Summary.*

Case No. 2

Another expense which requires adjustment in a similar manner is that for interest accrued on notes or mortgages payable.

Let us assume the company has outstanding a $10,000.00 *Mortgage Payable* upon which there is six per cent interest payable semi-annually, June 1st and December 1st.

Criticism

Unless the proper adjustment is made, the year's expenses will not include the interest expense in amount of $50.00, December's share of the interest on the $10,000.00 *Mortgage Pay-*

able, because the interest for December will not be paid until the following June.

Adjustment

Interest Expense	$50.00	
Interest Accrued on Mortgage Payable		$50.00
To record one month's interest at 6% on $10,000.00 Mortgage Payable.		

Conclusion

When the closing entries are written, the interest expense account will be closed to the *Profit and Loss Summary* and the amount will include this accrued interest, together with any other interest actually paid. The ledger accounts would then appear as follows:

Interest Expense

Interest paid during year	$757.00	To Profit & Loss Summary	$807.00
Dec. Interest accrued	50.00		
	$807.00		$807.00

Interest Accrued on Mortgage Payable

		Dec. 31 Adjustment	$ 50.00

GROUP II

ADJUSTMENTS REQUIRED FOR ACCRUED INCOME AND CORRESPONDING ACCRUED ASSETS

Suppose that the company has on its trial balance an *Investment* account, with a debit balance of $2000.00, and that investigation of the account shows that the company owns two $1000 industrial bonds which pay 5% April and October 1st of each year. The last interest check was recorded October 1st. If the books were closed without adjustment, the interest accrued from October 1st to the end of the year would not be included in the income for the year, thereby understating income by exactly $25.00.

ADJUSTMENT

General Journal

Accrued interest receivable	$25.00	
Interest earned		$25.00
To set up the accrued asset and credit the interest earned account with 3 months' interest earned in the current year.		

Conclusion

When this entry is posted, the accounts will reflect the true financial condition. The year's interest income will include all interest earned, and the accrued interest receivable will be set up so that it may appear on the yearly balance sheet as an asset to be added to the book value of the bond.

The accounts would look as follows:

Investments

2 Bonds; interest dates April 1, Oct. 1	$2000.00		

Interest Earned

		Cash collected from all sources	$112.00
		Accrued on Bonds	25.00
			$137.00

Accrued Interest Receivable

Accrued Oct. 1 to Dec. 31 $2000 at 5%	$ 25.00		

GROUP III

Deferred Expense Items

A. Supply Inventories. — At the close of the accounting period there will often be certain supplies on hand which should be inventoried very much the same as merchandise. When supply items necessary to carry on the business are purchased, they are

usually charged directly to expense accounts such as: *Office supplies, Gasoline and Oil, Coal or Fuel,* and *Postage.* At the close of the accounting period the cost value of unused supplies should be determined and taken away from the expense accounts to which they were charged. This is easily accomplished by adjustment entries such as the following:

GENERAL JOURNAL

Office Supplies Inventory	$ 60.00	
Office Supplies		$ 60.00
To record the asset value of office supplies on hand and to adjust the expense account to its true cost for the period.		
-and-		
Gasoline & Oil Inventory	$210.00	
Gasoline & Oil		$210.00
To record the asset value of 1000 gals. of gasoline @ .14 = $140.00 and motor oil on hand $70.00, and to reduce the expense accounts accordingly		

After these entries have been written and posted, the ledger accounts would look as follows, and the balance of the supply accounts would reflect the true expense for the period, while the inventory accounts represent assets.

OFFICE SUPPLIES

Dec. 31 to date, Total Purchases	$190.00	June 1 — Inventory adjustment	$60.00

OFFICE SUPPLIES INVENTORY

June 1 — Adjustment	$ 60.00		

B. Case for Prepaid Expenses. — Often certain expenses such as advertising and insurance will be purchased in amounts which will benefit more than the year period. Insurance companies, for instance, and their agents will give a good discount if a three-year policy is purchased instead of a one-year policy. Similarly,

an advertising agent will quote a very attractive figure and allow a big discount if a yearly advertising contract is paid in advance instead of taking one payable month by month.

Suppose a fire insurance policy is renewed November 1st for three years and a check given for the total premium $360.00.

If the books were closed without adjustment, the entire $360.00 would be included in the year's insurance expense account, even though the current year would receive only two months' fire insurance protection.

ADJUSTMENT TO CORRECT

Prepaid Insurance Premiums	$340.00	
Insurance Expense		$340.00
To set up the asset value of prepaid insurance premiums and to reduce the year's insurance expense accordingly.		

CASE FOR PREPAID ADVERTISING

Suppose, similarly, a six months' advertising contract were signed October 1st and a check issued $480.00. At that time the entry would be:

GENERAL JOURNAL

Advertising	$480.00	
Cash		$480.00
Contract for October to March inclusive		

If the books were closed without adjustment, the current year would stand $240.00 in advertising which would, in fact, benefit the first three months of the next fiscal year. This, of course, is not fair, and so the following adjustment entry should be written.

ADJUSTMENT TO CORRECT

Prepaid Advertising	$240.00	
Advertising		$240.00
To set up the asset value of the unused advertising and reduce the advertising expense accordingly.		

GROUP IV

ADJUSTMENTS FOR: DEFERRED INCOME AND CORRESPONDING LIABILITY

Rental Income and *Subscription Income* are good examples of *Income* accounts which are often received as payments covering more than one period. If the income collected in advance will benefit more than one period, because the current period should be credited only with its correct share of income, it will be necessary to write an adjustment entry which will defer that part of the income which belongs to the future and thus permit the current period to receive credit only for income earned in the period under review. Such an adjustment will place on the balance sheet a liability for the amount of *Rentals Received in Advance* or for *Subscriptions Received in Advance.*

Deferred Income

Case No. 1

Suppose Mr. Smith rents out part of his building and collects the rents quarterly in advance. A trial balance drawn December 31, 19— reveals an account *Rental Income* with a credit balance of $1300.00. Upon examination of the account, it is learned that on November 1st $300.00 was received, being the rental for the months of November, December, and January. Thus it is seen that, unless an adjustment entry is written, the present year's income will be overstated by $100.00 which rightfully belongs with the income of the following year.

Adjustment Entry

Rental Income	$100.00	
Rentals Received in Advance		$100.00
To defer one month (January) rent from the current year to the next where it rightfully belongs.		

If this entry is written, the rental income will be adjusted to $1200.00, the true earnings for the current year. At the same time the liability of the company to the tenant will be recorded on the balance sheet under the caption, *Rentals Received in Advance.*

CASE ILLUSTRATION: ADJUSTING AND CLOSING THE BOOKS

In order the better to visualize the entire procedure of adjusting and closing a set of books, where adjustments are required for accrued and deferred items as well as for the new merchandise inventory, depreciation, and provision for doubtful accounts, a complete illustrative problem is now presented. Following the statement of the problem, a complete demonstration solution is presented.

The following trial balance is taken from the books of the Morgan Company:

TRIAL BALANCE — DECEMBER 31, 19—

1. Cash	$ 6,420.00	
2. Notes Receivable	2,000.00	
3. Accounts Receivable	24,180.00	
4. Reserve for Doubtful Accounts		$ 482.00
5. Inventory January 2	12,000.00	
6. American Can Bonds 6%	2,000.00	
7. Land	6,000.00	
8. Buildings	20,000.00	
9. Machinery	18,000.00	
10. Equipment & Tools	5,400.00	
11. Delivery Equipment	2,600.00	
12. Reserve for Depreciation of Buildings		2,000.00
13. Reserve for Depreciation of Machinery		7,200.00
14. Reserve for Depreciation of Equipment & Tools		860.00
15. Notes Payable		4,000.00
16. Accounts Payable		16,000.00
17. Mortgage Payable 6%		12,000.00
18. John Morgan, Capital		46,858.00
19. Sales		65,000.00
20. Purchases	40,000.00	
21. Taxes	120.00	
22. Insurance	240.00	
23. Advertising	600.00	
24. Salesmen's Salaries	8,400.00	
25. General Office Salaries	6,200.00	
26. Interest Expense	372.00	
27. Interest Income		132.00
	$154,532.00	$154,532.00

It has been determined that adjustments will have to be written for the following:

1. The *New Inventory* is valued at $14,500.00.
2. The *Reserve for Doubtful Accounts* is to be increased by 1% of *Sales*.
3. Increase the *Reserve for Depreciation of Buildings* by the annual rate of 2%.
4. Increase the *Reserve for Depreciation of Machinery* by the annual rate 5%.
5. Increase the *Reserve for Depreciation of Equipment and Tools* $485.00.
6. Create a *Reserve for Depreciation of Delivery Equipment* calculated to be $500.00.
7. The insurance has at present an unexpired value of $80.00.
8. The advertising contract similarly has an unexpired value of $120.00.
9. The semi-annual interest on the mortgage will be payable January 2 next and it is decided to accrue this expense.
10. There is also $18.00 to be accrued on the *Notes Payable*.
11. The bonds of the American Can Company pay interest regularly, 3% May 1st and November 1st, accrue the interest for the balance of the year.
12. It has been calculated from current tax bills that taxes in amount of $160.00 should be accrued.
13. Commission and salaries are due to salesmen in amount of $280.00.
14. Similarly, general office salaries are due in amount of $210.00.

ACCOUNTING PROCEDURE

In practice the accounting department usually prepares the work sheet first, so that the required financial statements may be quickly prepared for use of the management. After this work is completed, the accounting department then closes the books and prepares them for use in the new year. We shall follow that procedure now and present first the completed work sheet.

The work sheet on the following page is fundamentally the same as that presented in Chapter X. The form has been expanded to include a set of columns for the adjusted trial balance. These columns are used to check the accuracy of the work and are helpful to beginning students, particularly when there are more than a few adjustment entries.

EXPLANATION OF THE ADJUSTMENT ENTRIES

The student will probably get the most from a study of the work sheet if he reviews carefully each adjustment entry. With this in mind, the fifteen entries necessary to properly adjust the books are now written, together with appropriate explanations.

WORK SHEET
THE JOHN MORGAN COMPANY
DECEMBER 31, 19 __

		Trial Balance Dr.	Trial Balance Cr.	Adjustments Dr.	Adjustments Cr.	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.	Profit and Loss Expenses Dr.	Profit and Loss Income Cr.	Balance Sheet Assets Dr.	Balance Sheet Liab. N. W. Cr.
1	Cash	6 420 00				6 420 00				6 420 00	
2	Notes Receivable	2 000 00				2 000 00				2 000 00	
3	Accounts Receivable	24 180 00				24 180 00				24 180 00	
4	Reserve For Doubtful Accts.		482 00		(2) 650 00		1 132 00				1 132 00
5	Inventory, Jan. 2, 198__	12 000 00		(1) 14 500 00	(1a) 12 000 00	14 500 00				14 500 00	
6	American Can Bonds 6%	2 000 00				2 000 00				2 000 00	
7	Land	6 000 00				6 000 00				6 000 00	
8	Buildings	20 000 00				20 000 00				20 000 00	
9	Machinery	18 000 00				18 000 00				18 000 00	
10	Equipment And Tools	5 400 00				5 400 00				5 400 00	
11	Delivery Equipment	2 600 00				2 600 00				2 600 00	
12	Res. For Depr. Of Bldgs.		2 000 00		(3) 400 00		2 400 00				2 400 00
13	Res. For Depr. Of Machny.		7 200 00		(4) 900 00		8 100 00				8 100 00
14	Res. For Depr. Of Equip. & Tools		860 00		(5) 485 00		1 345 00				1 345 00
15	Notes Payable		4 000 00				4 000 00				4 000 00
16	Accounts Payable		16 000 00				16 000 00				16 000 00
17	Mortgages Payable 6%		12 000 00				12 000 00				12 000 00
18	John Morgan Capital		46 858 00				46 858 00				46 858 00
19	Sales		65 000 00				65 000 00		65 000 00		
20	Purchases	40 000 00				40 000 00		40 000 00			
21	Taxes	120 00		(12) 160 00		280 00		280 00			
22	Insurance	240 00			(7) 80 00	160 00		160 00			
23	Advertising	600 00			(8) 120 00	480 00		480 00			
24	Salesmen's Salaries	8 400 00		(13) 280 00		8 680 00		8 680 00			
25	General Office Salaries	6 200 00		(14) 210 00		6 410 00		6 410 00			
26	Interest Expense	372 00		(9) 360 00 (10) 18 00		750 00		750 00			
27	Interest Income		132 00		(11) 20 00		152 00		152 00		
		154 532 00	154 532 00								
28	Profit And Loss Summary			(1a) 12 000 00	(1) 14 500 00	12 000 00	14 500 00	12 000 00	14 500 00		
29	Provision For Doubtful Accounts			(2) 650 00		650 00		650 00			
30	Depreciation Of Bldgs.			(3) 400 00		400 00		400 00			
31	Depreciation Of Machinery			(4) 900 00		900 00		900 00			
32	Depr. Of Equip. & Tools			(5) 485 00		485 00		485 00			
33	Depr. Of Delivery Equip.			(6) 500 00		500 00		500 00			
34	Res. For Dep. Of Del. Equip.				(6) 500 00		500 00				500 00
35	Unexpired Insurance			(7) 80 00		80 00				80 00	
36	Unexpired Advertising			(8) 120 00		120 00				120 00	
37	Interest Accrued On Mortgs.				(9) 360 00		360 00				360 00
38	Interest Accrued On Notes Pay.				(10) 18 00		18 00				18 00
39	Interest Accrued On Bonds			(11) 20 00		20 00				20 00	
40	Taxes Accrued				(12) 160 00		160 00				160 00
41	Salesmen's Salaries Accrued				(13) 280 00		280 00				280 00
42	Gen. Office Salaries Accrued				(14) 210 00		210 00				210 00
				30 683 00	30 683 00	173 015 00	173 015 00				
	Net Profit For The Period							7 957 00			7 957 00
								79 652 00	79 652 00	101 320 00	101 320 00

General Journal

	Debit		Credit	
–1–				
Inventory Dec. 31, 194–	14,500	00		
Profit & Loss Summary			14,500	00
To set up the asset value of the new Inventory.				
–1–A–				
Profit & Loss Summary	12,000	00		
Inventory January 2, 194–			12,000	00
To transfer the beginning inventory to the Profit and Loss Summary.				
–2–				
Bad Debt Expense	650	00		
Reserve for Doubtful Accounts			650	00
To provide the required increase for probable bad debts; 1% of Sales.				
–3–				
Depreciation of Buildings	400	00		
Reserve for Depreciation of Buildings			400	00
To provide the depreciation for year 2%.				
–4–				
Depreciation of Machinery	900	00		
Reserve for Depreciation of Machinery			900	00
To provide the year's depreciation 5%.				
–5–				
Depreciation of Equipment & Tools	485	00		
Reserve for Depreciation of Equipment and Tools			485	00
To increase the reserve by the current provision.				
–6–				
Depreciation of Delivery Equipment	500	00		
Reserve for Dep. of Del. Equipment			500	00
To create a reserve for depreciation of the delivery equipment.				
–7–				
Unexpired Insurance	80	00		
Insurance			80	00
To record the asset value of the unexpired insurance and to reduce the insurance expense accordingly.				
–8–				
Unexpired Advertising	120	00		
Advertising			120	00
To record the asset value of the unexpired advertising and to reduce the advertising expense accordingly.				
–9–				
Interest Expense	360	00		
Interest Accrued on Mortgage			360	00
To accrue the semi-annual interest 3% on $12,000.00 — $360.00 due Jan. 2 next.				
–10–				
Interest Expense	18	00		
Interest accrued on Notes Payable			18	00
To accrue interest to date.				

-11-		
Interest Accrued on Bonds	20.00	
Interest Income		20.00
To accrue 2 months bond interest.		
-12-		
Taxes	160.00	
Taxes Accrued		160.00
To accrue balance of year's taxes.		
-13-		
Salesmen's Salaries	280.00	
Salesmen's Salaries Accrued		280.00
To add the accrued salaries to the expense account and record the corresponding liability.		
-14-		
General Office Salaries	210.00	
General Office Salaries Accrued		210.00
To add the accrued salaries to expense and set up the corresponding liability.		

The transaction numbers used to designate the adjusting entries above have been used to designate the respective adjustments on the work sheet. It will be helpful if the student traces each of these entries from the journal to the work sheet.

After the adjustment entries have been written on the work sheet, the first four columns are consolidated into the *Adjusted Trial Balance;* this procedure gives the same result as is obtained when the adjusting entries are posted to the ledger. At this point the student should find little difficulty in classifying the accounts into the last four columns. When this has been done and the columns added, a profit of $7957.00 is apparent; the assets are greater than the liability and net worth accounts by that amount, just as the income accounts total the identical amount greater than the total of the expense column.

THE PROFIT AND LOSS STATEMENT

At this point it may prove helpful to present a profit and loss statement, prepared from the *Profit and Loss* columns of the work sheet.

The John Morgan Company

Statement of Income, Profit and Loss for the Year Ended December 31, 19—

Income from Sales			$65,000.00
Deduct the Cost of Goods Sold:			
Inventory, Jan. 2, 19—		$12,000.00	
Add Purchases		40,000.00	
Total Merchandise available for sale		$52,000.00	
Less Inventory Dec. 31		14,500.00	
Cost of Goods Sold			37,500.00
Gross Profit on Sales			$27,500.00
Deduct: Expenses of Operation:			
Selling Expense:			
Advertising	$ 480.00		
Salesmen's Salaries	8,680.00		
Depr. of Del. Equip.	500.00		
		$ 9,660.00	
General and Administrative Expense:			
Taxes	$ 280.00		
Insurance	160.00		
General Office Salaries	6,410.00		
Bad Debt Expense	650.00		
Depr. of Bldgs.	400.00		
Depr. of Machinery	900.00		
Depr. of Equip. & Tools	485.00		
		$ 9,285.00	
Total Operating Expense			18,945.00
Operating Profit			$ 8,555.00
Deduct the Non-Operating Expense			
Interest Expense		$ 750.00	
Less Interest Income		152.00	
Net Non-Operating Expense			598.00
Net Profit for the Period			$ 7,957.00

BALANCE SHEET

The following balance sheet is prepared from the *Balance Sheet* columns of the work sheet. The preparation of the balance sheet from the completed work sheet may be easily understood, by tracing each amount in the *Balance Sheet* columns to the balance sheet below.

The John Morgan Company

Balance Sheet as of December 31, 19—

Assets

Current Assets:			
Cash		$ 6,420.00	
Notes Receivable		2,000.00	
Accounts Receivable	$24,180.00		
Less Reserve for Bad Debts	1,132.00	23,048.00	
Merchandise Inventory Dec. 31		14,500.00	
American Can Bonds	2,000.00		
Add Accrued Interest	20.00	2,020.00	
Total Current Assets			$47,988.00
Fixed Assets:			
Land		6,000.00	
Buildings	20,000.00		
Less Reserve for Depr.	2,400.00	17,600.00	
Machinery	18,000.00		
Less Reserve for Depr.	8,100.00	9,900.00	
Equipment and Tools	5,400.00		
Less Reserve for Depr.	1,345.00	4,055.00	
Delivery Equipment	2,600.00		
Less Reserve for Depr.	500.00	2,100.00	
Total Fixed Assets			39.655.00
Deferred Charges:			
Unexpired Insurance	80.00		
Unexpired Advertising	120.00		200.00
Total Assets			$87,843.00

Liabilities and Net Worth

Current Liabilities:			
Notes Payable	4,000.00		
Accrued Interest	18.00	4,018.00	
Accounts Payable		16,000.00	
Mortgage Interest Accrued		360.00	
Taxes Accrued		160.00	
Salesmen's Salaries Accrued		280.00	
General Office Salaries Accrued		210.00	
Total Current Liabilities			21,028.00
Fixed Liabilities:			
Mortgage Payable			12,000.00
Total Liabilities			33,028.00

Net Worth:		
John Morgan, Capital Jan. 2	$46,858.00	
Add Profit for Year	7,957.00	
Capital Dec. 31		$54,815.00
Total Liabilities and Net Worth		$87,843.00

CLOSING ENTRIES

To continue the accounting work usually done at the end of the period, we next present the Journal entries required to close the books. As in the previous illustration the books are closed by means of three Journal entries.

General Journal

—1—		
Sales	$65,000.00	
Interest Income	152.00	
Profit and Loss Summary		$65,152.00
To transfer the income account balances to the P. & L. Summary and close the income accounts		
—2—		
Profit and Loss Summary	59,695.00	
Purchases		40,000.00
Taxes		280.00
Insurance		160.00
Advertising		480.00
Salesmen's Salaries		8,680.00
General Office Salaries		6,410.00
Interest Expense		750.00
Bad Debt Expense		650.00
Depreciation of Machinery		900.00
Depreciation of Buildings		400.00
Depreciation of Equipment and Tools .		485.00
Depreciation of Delivery Equipment ..		500.00
To close sundry expense accounts to the Profit and Loss Summary		
—3—		
Profit and Loss Summary	7,957.00	
John Morgan Capital		7,957.00
To transfer the net profit to the proprietors Capital account and close the P. & L. Summary account		

GENERAL LEDGER

The next step usually at this point is to post the adjusting and closing entries to the Ledger.

1 CASH

Balance	6,420.00		

2 NOTES RECEIVABLE

Balance	2,000.00		

3 ACCOUNTS RECEIVABLE

Balance	24,180.00		

4 RESERVE FOR DOUBTFUL ACCOUNTS

		Balance	482.00
		Adjustment (2)	650.00
		December 31, Balance	1,132.00

5 INVENTORY

Balance Jan.	12,000.00	Adj. (1 A) to P. & L.	12,000.00
Adjustment (1)	14,500.00		

6 AMERICAN CAN COMPANY BONDS 6%

Balance	2,000.00		

7 LAND

Balance	6,000.00		

8 BUILDINGS

Balance	20,000.00		

9 MACHINERY

Balance	18,000.00		

10 EQUIPMENT AND TOOLS

Balance	5,400.00		

11 DELIVERY EQUIPMENT

Balance	2,600.00		

12 RESERVE FOR DEPRECIATION OF BUILDINGS

		Bal. Jan.	2,000.00
		Dec. adjustment (3)	400.00
			2,400.00

13 RESERVE FOR DEPRECIATION OF MACHINERY

		Bal. Jan.	7,200.00
		Dec. adjustment (4)	900.00
			8,100.00

14 RESERVE FOR DEPRECIATION OF EQUIPMENT AND TOOLS

		Bal. Jan.	860.00
		Adjustment (5)	485.00
			1,345.00

15 NOTES PAYABLE

		Balance	4,000.00

16 ACCOUNTS PAYABLE

		Balance	16,000.00

17 MORTGAGE PAYABLE

		Balance	12,000.00

18 JOHN MORGAN CAPITAL

		Jan. Balance	46,858.00
		Profit for year (3)	7,957.00
			54,815.00

19 SALES

Closed to P. & L. (1)	65,000.00	Balance	65,000.00

20 PURCHASES

Balance	40,000.00	Closed to P. & L. (2)	40,000.00

21 TAXES

Balance	120.00	Closed P. & L. (2)	280.00
Accrual (12)	160.00		
	280.00		280.00

22 INSURANCE

Balance	240.00	Adjustment (7)	80.00
		Closed P. & L. (2)	160.00
	240.00		240.00

23 ADVERTISING

Balance	600.00	Adjustment (8)	120.00
		Closed P. & L. (2)	480.00
	600.00		600.00

24 SALESMEN'S SALARIES

Balance	8,400.00	Closed P. & L. (2)	8,680.00
Accrued (13)	280.00		
	8,680.00		8,680.00

25 GENERAL OFFICE SALARIES

Balance	6,200.00	Closed P. & L. (2)	6,410.00
Accrual (14)	210.00		
	6,410.00		6,410.00

26 INTEREST EXPENSE

Balance	372.00		
Accrual (9)	360.00		
Accrual (10)	18.00	Closed P. & L. (2)	750.00
	750.00		750.00

27 INTEREST INCOME

		Balance	132.00
Closed to P. & L. (1)	152.00	Accrual (11)	20.00
	152.00		152.00

28 PROFIT AND LOSS SUMMARY

Adj. (1 a) Old Inv.	12,000.00	Adj. (1) New Inv.	14,500.00
Closing (2) Expenses	59,695.00	Closing (1) Income	65,152.00
Closing (3) Profit to Capital	7,957.00		
	79,652.00		79,652.00

29 PROVISION FOR DOUBTFUL ACCOUNTS

Adj. (2)	650.00	Closed P. & L. (2)	650.00

30 DEPRECIATION OF BUILDINGS

Adj. (3)	400.00	Closed P. & L. (2)	400.00

31 DEPRECIATION OF MACHINERY

Adj.	900.00	Closed P. & L. (2)	900.00

32 DEPRECIATION EQUIPMENT AND TOOLS

Adj. (5)	485.00	Closed P. & L. (2)	485.00

33 DEPRECIATION OF DELIVERY EQUIPMENT

Adj. (6)	500.00	Closed P. & L. (2)	500.00

34 RESERVE FOR DEPRECIATION OF DELIVERY EQUIPMENT

		Adj. (6)	500.00

35 UNEXPIRED INSURANCE

Adj. (7)	80.00		

36 UNEXPIRED ADVERTISING

Adj. (8)	120.00		

37 INTEREST ACCRUED ON MORTGAGE

		Adj. (9)	360.00

38 INTEREST ACCRUED ON NOTES PAYABLE

		Adj. (10)	18.00

39 INTEREST ACCRUED ON BONDS

Adj. (11)	20.00		

40 TAXES ACCRUED

		Adj. (12)	160.00

41 SALESMENS SALARIES ACCRUED

		Adj. (13)	280.00

42 GENERAL OFFICE SALARIES ACCRUED

		Adj. (14)	210.00

POST CLOSING TRIAL BALANCE

The concluding step in the demonstration is the preparation of a post closing trial balance.

Post Closing Trial Balance

1. Cash	$ 6,420.00	
2. Notes Receivable	2,000.00	
3. Accounts Receivable	24,180.00	
4. Reserve For Doubtful Accts.		$ 1,132.00
5. Inventory (New)	14,500.00	
6. American Can Bonds	2,000.00	
7. Land	6,000.00	
8. Buildings	20,000.00	
9. Machinery	18,000.00	
10. Equipment & Tools	5,400.00	
11. Delivery Equipment	2,600.00	
12. Reserve for Depr. of Bldgs.		2,400.00
13. Reserve for Depr. Machinery		8,100.00
14. Reserve Depr. Equip. & Tools		1,345.00
15. Notes Payable		4,000.00
16. Accounts Payable		16,000.00
17. Mortgage Payable		12,000.00
18. John Morgan, Capital		54,815.00
34. Reserve Depr. Delivery Equip.		500.00
35. Unexpired Insurance	80.00	
36. Unexpired Advertising	120.00	
37. Interest Accrued on Mortgage		360.00
38. Interest Accrued on Notes Payable		18.00
39. Interest Accrued on Bonds	20.00	
40. Taxes Accrued		160.00
41. Salesmen's Salaries Accrued		280.00
42. General Office Salaries Accrued		210.00
	$101,320.00	$101,320.00

QUESTIONS ON THE CHAPTER

1. What is your understanding of the *Cash Basis* of account keeping?

2. When books are kept on the cash basis, why should they be adjusted?

3. (*a*) State four different types of adjustments.
   (*b*) Illustrate by journal entry the adjustment required in each case.
   (*c*) Explain the twofold effect of each entry.

4. A bookkeeper once said, " The writing of adjustment entries

is an entirely unnecessary thing, because in the long run they do not vary the net Profit or Loss." He explained further that it made no difference if June did absorb May's expenses, or July received some of June's income, because May absorbed April's expense, and no doubt June would get part of May's income. Comment on this.

5. Distinguish between an adjusting and a closing entry.
6. Why must nominal accounts be closed?
7. (*a*) What is an after adjustment trial balance?
   (*b*) What is an after closing trial balance?
8. If statements have been prepared at the end of the year by use of a work sheet, will it be necessary for the bookkeepers to write adjusting and closing entries just the same? Why or why not?
9. Explain how we adjust for the New Inventory.
10. Outline the entries required to close a set of books.
11. What are the differences between a Profit and Loss Account and a Profit and Loss Statement?
12. (*a*) Explain why wages may have to be accrued.
    (*b*) Give typical entries.

PROBLEM MATERIAL

PROBLEM 1

The following trial balance was taken from the books of the Brown and Green Store at November 30:

Accounts Receivable	$ 38,742.90	
Reserve for Doubtful Accounts		$ 524.00
Inventory Merchandise 5/31/39	12,714.74	
Accounts Payable		42,970.00
Notes Payable		30,000.00
Notes Receivable	2,200.00	
Store Equipment	16,000.00	
Reserve for Dep. of Store Equipt.		3,200.00
Delivery Equipment	22,480.00	
Reserve for Dep. of Delivery Equipt.		4,960.00
Drivers' Salaries	5,000.00	
Salesmen's Salaries	15,720.00	
Clerks' Salaries	3,614.36	
Executive Salaries	8,000.00	
Advertising	4,200.00	
Freight Inward	810.60	
Sundry Delivery Expenses	121.40	
Gas, Oil & Tire Expense	1,319.25	
Cash in Banks	11,416.75	
Change Funds	1,200.00	
General Office Expense	624.00	
Auto Insurance	1,840.00	
General Insurance	622.00	
Interest Expense	42.00	

Interest Income		$ 176.00
John Brown Personal	$ 5,000.00	
John Brown Capital		24,200.50
Thomas Green Personal	3,500.00	
Thomas Green Capital		15,160.20
Purchases	67,943.20	
Sales		102,486.50
Sales Returns & Allowances	1,380.50	
Purchase Returns & Allowances		814.50
	$224,491.70	$224,491.70

Adjustment Data:

(1) The Inventory of Merchandise on hand is valued at $16,840.90.

(2) Increase the Reserve for Doubtful Accounts by 1% of Accounts Receivable.

(3) Accrue Salaries as follows: Drivers $200.00; Salesmen $612.00; Clerks $96.00.

(4) The unexpired Advertising is valued at $1200.00.

(5) There is unexpired Auto Insurance of $216.00, and General Insurance of $72.00.

(6) Interest on Notes Payable of $900.00 is to be accrued; this is payable December 1st.

(7) Interest on Notes Receivable is to be accrued in the amount of $24.20.

(8) Increase the Reserve for Depreciation of Store Equipment $800.00.

(9) Current Depreciation on Autos is calculated as $448.00.

Required:

(1) Write in a two-column general journal the entries necessary to adjust and close the books. In this respect the partners share profits and losses equally, and you are to close any gain or loss to the partners' personal accounts, which in turn are to be closed to the partners' capital accounts.

(2) Prepare an accountant's work sheet.

(3) Prepare a profit and loss statement and a balance sheet.

(4) Prepare accounts for the profit and loss summary, the partners' capital and personal accounts, post entries affecting these accounts and balance them.

Problem 2

The following trial balance was taken from the books of O. McClave at August 1, 19—:

Cash	$ 12,210.19	
Accounts Receivable	21,900.70	
Notes Receivable	2,476.50	
Reserve for Doubtful Accounts		$ 486.72
Inventory Feb. 1	16,470.84	

Land & Buildings	$ 40,000.00	
Res. for Dep. of Buildings		$ 700.00
Taxes	620.00	
Insurance	185.80	
Advertising	2,200.00	
Machinery & Equipment	14,000.00	
Res. for Dep. of Mach'y & Equip.		1,400.00
Office Equipment	1,680.00	
Res. for Dep. of Office Equip.		168.00
Accounts Payable		18,472.63
Notes Payable (short term)		3,000.00
Mortgage Payable		20,000.00
Interest Expense	640.70	
Salesmen's Salaries & Commission	4,384.00	
McClave Capital		61,674.10
Sales		82,750.48
Purchases	65,107.30	
Inward Freight	418.70	
Delivery Expense	1,685.20	
Postage	22.00	
Finance Notes Payable (1–3 yrs.)		1,850.00
Trade Acceptances Receivable	3,200.00	
General Office Salaries	3,300.00	
Totals	$190,501.93	$190,501.93

Adjustment Data:

1. The Merchandise Inventory on hand is valued at $15,871.40.
2. The Accounts Receivable and Notes Receivable have been evaluated and it is decided that $174.07 should be added to the Reserve for Doubtful Accounts.
3. The annual depreciation rates as follows: Buildings 2% which are separately valued at $35,000.00; Machinery and Equipment 6%; Office Equipment 5%. Provide proper additions to the several reserve accounts.
4. There is due Salesmen as commissions earned but not paid $165.00.
5. Salaries of General Office workers to be accrued amount to $184.00.
6. Interest on the Mortgage in amount of $200.00, and of $12.40 on Notes Payable is to be accrued.
7. There is $36.00 to be accrued on one Note Receivable, all other notes have paid their interest to date.
8. There is Advertising Unexpired valued at $600.00.

Required:

(1) Prepare an accountant's work sheet.

(2) Prepare a balance sheet and a profit and loss statement in good form.

CHAPTER XIII

ACCOUNTING AT THE END OF THE FISCAL PERIOD (Concluded)

REVERSAL ENTRIES

In the last chapter a complete illustration of adjusting and closing the books was presented. The example was concluded with a post-closing trial balance. It will be necessary, before the transactions of the next period are entered in the accounts, to record certain so-called reversal or re-adjusting entries. In our example, for instance, there appear two accrued salary accounts: *Salesmen's Salaries Accrued* and *General Office Salaries Accrued.* Accounts such as these represent a definite liability of the company to pay the salary. This will be done, in most instances, the next pay day. Such a payment will, of course, liquidate the liability of the company. Since these salaries, when paid, will be charged against the expense accounts *Salesmen's Salaries* and *General Office Salaries,* it will be necessary to reverse the former adjustment entries. The accrued portion of the current pay-roll is transferred from the *Salaries Accrued* accounts to the *Salary* accounts. In our case this is accomplished by the two entries which follow:

GENERAL JOURNAL

—1—

Salesmen's Salaries Accrued	41	$280.00	
Salesmen's Salaries	24		$280.00
To close the accrued salaries account and transfer the balance to the expense account.			

—2—

General Office Salaries Accrued	42	$210.00	
General Office Salaries	25		$210.00
To close the accrued salaries account and transfer the balance to the expense account.			

After these entries have been posted and the salaries due on the next pay day January 4, 19— paid, which we shall assume

is $500.00 to salesmen and $480.00 to the general office workers, then the accounts would look as follows:

24 SALESMEN'S SALARIES

194– Dec. 31	Total Paid (details omitted for convenience)	$8,420.00	Dec. 31	Closing entry To P. & L. Summary	$8,700.00
	Accrued Adj. entry 13.	280.00			
		$8,700.00			$8,700.00
Jan. 4	Pay-roll for week	500.00	Jan. 2	Reversal (1)	280.00

41 SALARIES OF SALESMEN ACCRUED

Jan. 2	Reversal (1)	$280.00	Dec. 31	Adj. 13	$280.00

25 GENERAL OFFICE SALARIES

194– Dec. 31	Total salaries paid (Details omitted)	$6,200.00	Closed to P. & L. Summary	$6,410.00
	Accrual Adj. Entry 14	210.00		
		$6,410.00		$6,410.00
Jan. 4	Pay-roll	480.00	Jan. 2 Reversal	210.00

42 GENERAL OFFICE SALARY ACCRUED

Jan. 2	Reversal	$210.00	Dec.	Adjustment Entry 14	$210.00

A study of the accounts above will reveal that the reversal entries make it possible for the current period to be relieved of the salaries expense which was absorbed in the last period, where it rightfully belonged; and at the same time charge the new period with the current salary expense. At the end of the current year any salaries earned by the salesmen or general office force, but not paid, will have to be added to the respective salary expense accounts and credited to the accrued salary accounts once more by means of adjustment entries.

In a similar manner reversal entries will also have to be written to close the *Unexpired Advertising* and the *Unexpired In-*

surance accounts, respectively, to the *Advertising* and *Insurance* accounts. This is accomplished by the following journal entries:

GENERAL JOURNAL

–3–

Advertising	23	$120.00	
Unexpired advertising	36		$120.00
To reverse the accrual.			

–4–

Insurance	22	$ 80.00	
Unexpired insurance	35		$ 80.00
To reverse the accrual.			

After these entries have been posted the accounts affected in the ledger will look as follows:

23 ADVERTISING

Total Paid	$600.00	Adjustment (8) Dec.	$120.00
		Closed to P. & L. Dec.	480.00
	$600.00		$600.00
Jan. Reversal (3)	120.00		

36 UNEXPIRED ADVERTISING

Dec. Adjust. 8	$120.00	Jan. Reversal (3)	$120.00

22 INSURANCE

Total paid	$240.00	Dec. Adjustment 7	$ 80.00
		Closed to P. & L.	160.00
	$240.00		$240.00
Jan. 4 Reversal 4	80.00		

35 UNEXPIRED INSURANCE

Dec. Adjustment 7	$80.00	Reversal 4	$80.00

A study of the accounts above will reveal that the respective expense accounts have had charged to them the amounts which were taken out by proper adjustment entries at the close of the

last accounting period. The amounts now in the Advertising and Insurance accounts will be absorbed in the new year, together with any other Advertising or Insurance which may be purchased in that year. Of course, it will be necessary to write adjustments at the end of the next year for any portion of these expenses which might be unexpired at that time.

Three accrued liability accounts; *Interest Accrued on Mortgages, Interest Accrued on Notes Payable,* and *Taxes Accrued* will also have to be reversed, and the respective expense accounts credited so that the expenses of the new period will not be charged with these expenses which, by proper adjustment entries, were absorbed in the last year.

The following reversal entries will accomplish this purpose:

General Journal

–5–			
Interest Accrued on Mortgage	37	$360.00	
Interest Expense	26		$360.00
To reverse.			
–6–			
Interest Accrued on Notes Payable	38	$ 18.00	
Interest Expense	26		$ 18.00
To reverse			
–7–			
Taxes Accrued	40	$160.00	
Taxes	21		$160.00
To reverse			

After reversal entries 5, 6, and 7 above have been posted, the ledger accounts affected will look as follows:

26 Interest Expense

Total paid	$372.00		
Accrual Adjustment 9	360.00		
Accrual Adjustment 10	18.00	Closed on P. & L.	$750.00
	$750.00		$750.00
		Jan. 2. Reversal 5	360.00
		Jan. 2. Reversal 6	18.00

37 Interest Accrued on Mortgage

Reversed 5	$360.00	Adjustment 9	$360.00

38 INTEREST ACCRUED ON NOTES PAYABLE

Reversed 6	$ 18.00	Adjustment 10	$ 18.00

A study of the *Interest Expense* account above will indicate that, as the several interest items are paid during the year, only the amounts which should rightfully be absorbed in the new year will be included, because the present credit balance of $378.00 was absorbed in the last fiscal year, where it rightfully belonged. In a somewhat similar manner the accrued asset account, *Interest Accrued on Bonds,* will have to be reversed, and the *Interest Income* account debited for the $20.00 interest accrued in December.

The following reversal entry will conclude the reversal entries required for the John Morgan Company:

GENERAL JOURNAL

–8–

Interest Income	27	$ 20.00	
Interest Accrued on Bonds	39		$ 20.00
To reverse.			

After this reversal entry has been posted, the *Interest Income* and *Interest Accrued on Bonds* accounts will look as follows:

27 INTEREST INCOME

				Total collected	$132.00
Dec.	Closed to P. & L.	$152.00	Dec.	Accrued adj. 11	20.00
		$152.00			$152.00
Jan.	Reversal 8	$ 20.00			

39 INTEREST ACCRUED ON BONDS

Dec.	Adjustment 11	$ 20.00	Jan.	Reversal 8	$ 20.00

VARIATION IN ACCOUNTING TECHNIQUE WHEN FINANCIAL STATEMENTS ARE PREPARED FREQUENTLY

The entire example illustrating adjustments for inventory, bad debts, depreciation, accruals, and deferred items, together

with closing entries and subsequently reversal entries, presupposed that financial statements were prepared only once each year. In such a case the adjusting, closing, and reversal entries being required only once a year would not be too bothersome. If, however, financial statements are required more frequently, such as once a month as in many companies, then this procedure would be most inconvenient.

When financial statements are required monthly, they are frequently prepared directly from work sheets, and the books need not be closed more than once a year. The adjustment entries are written monthly directly to the work sheet from which the profit and loss statement and the balance sheet are prepared. If statements are prepared monthly, certain mixed accounts, those part nominal and part real, may be treated differently from those in our last illustration taken from the books of the John Morgan Company.

PREPAID INSURANCE

A good example of such a mixed account is one which results if a fire insurance policy is purchased which will benefit more than one period and where the premium is paid in advance.

As a case study let us assume that B. Kent operates a small factory and has monthly financial statements prepared for his aid in managing the enterprise. Let us further suppose that on July 1, 1940 he paid $240.00 premium for a two-year fire insurance policy.

At that date the following journal entry should be written:

GENERAL JOURNAL

Prepaid Fire Insurance	$240.00	
Cash		$240.00
To record payment of premium on Fire Policy No. ...., expiring July 1, 1942		

By this entry the expenditure is immediately charged to a deferred asset account; therefore, at the end of July it will be necessary only to calculate the month's *pro-rata* share, and by an appropriate adjustment entry charge July with one month's insurance cost. The premium $240.00 divided by 24 months,

on a *pro-rata* basis, would give a $10.00 monthly insurance charge. The following journal entry will adjust at July 31, 1940.

Insurance	$ 10.00	
Prepaid Insurance		$ 10.00
To charge July with one month's insurance cost.		

By this adjustment entry the value of prepaid insurance is reduced to $230.00, its value at July 31, and at the same time the insurance expense for July is just $10.00. This adjustment entry is written directly to the work sheet and the *Prepaid Insurance* account as adjusted $230.00 will be carried over to the debit column of the balance sheet group, while the *Insurance Expense* $10.00 is transferred to the nominal debit column. No reversal entry is required when this procedure is followed. Another similar adjustment is made at the end of August and each month thereafter, at which time the *Insurance* account is debited $10.00 and the *Prepaid Insurance* account reduced accordingly, which, after twenty-four months will have been entirely absorbed in operating costs.

This method is best for deferred expenses, when it is expected that the expenditure will benefit more than one accounting period. Advertising is often contracted for and paid several months in advance, and if that is done the expenditure should be charged to *Prepaid Advertising* rather than to *Advertising*. At the end of each month an adjustment entry should be written; a debit to *Advertising Expense,* and a credit to the *Prepaid Advertising* account. This will result in the *Prepaid Advertising* being gradually absorbed into expense over the period served by the advertising.

DEFERRED INCOME

In a like manner, when financial statements are prepared monthly, and income is received in advance for more than one accounting period, it is more advantageous to credit this income directly to a *Deferred Income* account. For example, let us suppose that *The Reel Life Magazine* is published by the Mutual Film Company and that all subscriptions are received in advance. As cash is received for subscriptions it should be credited to a *Deferred Income* account such as *Subscriptions*

Received in Advance. If this procedure is followed, as it usually is in magazine and newspaper offices, then at the end of the month the amount of subscriptions income which belongs to the current period is calculated. This amount is placed in an appropriate earning account such as *Subscriptions Income,* by an adjustment entry which debits the deferred income account *Subscriptions Received in Advance,* and credits *Subscriptions Income.* As an illustration, let us suppose that at July 31, 194— there appears a credit balance of $12,840.00 in the *Subscriptions Received in Advance* account. It is calculated that $1794.00 has been earned in July and the balance $11,046.00 belongs to future months. The following entry then should be written to the work sheet:

Subscriptions Received in Advance .	$1794.00	
Subscriptions Income		$1794.00
To adjust the deferred income account, and credit the current period with its share of subscription income.		

Another *Deferred Income* account handled in a similar manner is one created when rentals are received in advance. Let us suppose that the Mutual Film Company rents out part of its buildings and receives rentals quarterly in advance; that it received $360.00 rental July 1st for the months of July, August, and September. Just as soon as the cash is received it is credited to the *Deferred Income* account, *Rentals Received in Advance* instead of to an income account. Then, at the close of the monthly period July 31, by means of an adjusting entry, the current period is credited with $120.00, its proportioned share. The balance $240.00 will remain in the deferred income account. The following adjustment entry will accomplish this:

Rentals Received in Advance	$120.00	
Rental Income		$120.00
To transfer to July its proportionate share of Rental Income.		

This entry is written directly to the work sheet and will result in a credit of $120.00 to July as *Rental Income,* and at the same time defer the balance $240.00 to be absorbed in August and September.

DEMONSTRATION EXERCISE

At this point it will be helpful to present a complete case, utilizing some of the principles just presented. The illustration is based on a trial balance taken from the records of the Thomas Clark Supply Company at June 30, 19—. The company has prepared financial statements monthly, from work sheets, but the books have not been closed since last September. Each month appropriate adjustments were written and posted to the ledger. The trial balance has been written directly to the work sheet, and the following adjustments are determined to be necessary, for the month of June:

(1) The value of *Merchandise* on hand June 30 is $58,000.00.
(2) It is determined that an additional $120.00 should be added to the *Reserve for Doubtful Accounts.*
(3) The monthly charge for *Depreciation of Buildings* is $33.34.
(4) The monthly charge for *Depreciation of Machinery and Equipment* is $100.00.
(5) The present advertising contract in amount of $1600.00 was paid for June 1 and covers advertising for the months of June, July, August, and September.
(6) An examination of the *Prepaid Insurance* account indicates that $360.00 was paid for a one-year policy. This is being charged to expense at the rate of $30.00 per month.
(7) June tax expense is calculated to be $100.00.
(8) The account *Rentals Received in Advance* represents rentals received June 1, for June, July, August, and September.
(9) Accrued Salaries for June as follows: Salesmen $140.00, General Office $180.00.
(10) There is $20.00 interest earned in June to be accrued.
(11) There is $15.00 interest on notes payable to be accrued.

The adjustments required at June 30, in accordance with the data above, have been written directly to the work sheet exactly as would be done in practice. The adjustment numbers used above have been placed alongside each entry on the work sheet, to help trace the entries. It will be helpful if the student will read the following brief explanation of why each adjustment is written as it is, and by use of the adjustment numbers trace each adjustment to the work sheet.

Entry 1A. — This is a transferring entry written to bring down the cost of the *Old Inventory* to the *Profit and Loss Summary.*

THE THOMAS CLARK SUPPLY CO.
WORK SHEET JUNE 30, 19__

		Trial Balance		Adjustments for June		Trial Balance after adjustments		Profit and Loss		Balance Sheet	
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
1	Cash	3 000 00				3 000 00				3 000 00	
2	Accounts Receivable	12 000 00				12 000 00				12 000 00	
3	Reserve for Doubtful Accts.		600 00		(2) 120 00		720 00				720 00
4	Inventory May 31	60 000 00		(1) 58 000 00	(1a) 60 000 00	58 000 00				58 000 00	
5	Land	8 000 00				8 000 00				8 000 00	
6	Buildings	20 000 00				20 000 00				20 000 00	
7	Res. for Depr. of Bldgs.		866 67		(3) 33 33		900 00				900 00
8	Machy. & Equipment	12 000 00				12 000 00				12 000 00	
9	Res. for Depr. of Mach. & Equip.		2 800 00		(4) 100 00		2 900 00				2 900 00
10	Purchases	105 800 00				105 800 00		105 800 00			
11	Freight and Cartage	600 00				600 00		600 00			
12	Prepaid Advertising	1 600 00			(5) 400 00	1 200 00				1 200 00	
13	Salesmen's Salaries	28 000 00		(9) 140 00		28 140 00		28 140 00			
14	General Office Salaries	18 000 00		(9) 180 00		18 180 00		18 180 00			
15	Sales Returns	300 00				300 00		300 00			
16	Purchase Returns		500 00				500 00		500 00		
17	Sales		156 000 00				156 000 00		156 000 00		
18	Accounts Payable		34 000 00				34 000 00				34 000 00
19	Notes Payable		10 000 00				10 000 00				10 000 00
20	Purchase Discounts		1 200 00				1 200 00		1 200 00		
21	Sales Discounts	900 00				900 00		900 00			
22	Interest Expense	320 00		(11) 15 00		335 00		335 00			
23	Interest Income		500 00		(10) 20 00		520 00		520 00		
24	Prepaid Insurance	210 00			(6) 30 00	180 00				180 00	
25	Rentals Rec'd In Advance		800 00	(8) 200 00			600 00				600 00
26	Prepaid Taxes	1 200 00			(7) 100 00	1 100 00				1 100 00	
27	Thomas Clark Capital		67 580 00				67 580 00				67 580 00
28	Thomas Clark Drawings	3 000 00				3 000 00				3 000 00	
29	Temporary Investments	2 000 00				2 000 00				2 000 00	
30	Profit & Loss Summary			(1a) 60 000 00	(1) 58 000 00	60 000 00	58 000 00	60 000 00	58 000 00		
31	Prov. for Doubtful Accts.	600 00		(2) 120 00		720 00		720 00			
32	Depr. of Buildings	166 67		(3) 33 33		200 00		200 00			
33	Depr. of Mach. & Equip.	500 00		(4) 100 00		600 00		600 00			
34	Advertising Expense	2 000 00		(5) 400 00		2 400 00		2 400 00			
35	Insurance Expense	150 00		(6) 30 00		180 00		180 00			
36	Taxes	500 00		(7) 100 00		600 00		600 00			
37	Rental Income		1 000 00		(8) 200 00		1 200 00		1 200 00		
38	Accrued Salaries				(9) 320 00		320 00				320 00
39	Accrued Interest Rec'able			(10) 20 00		20 00				20 00	
40	Interest Accrued on Notes Pay.				(11) 15 00		15 00				15 00
		275 846 67	275 846 67	119 338 33	119 338 33	334 455 00	334 455 00				
	Net Profit for Period							3 465 00			3 465 00
								217 420 00	217 420 00	120 500 00	120 500 00

Entry 1. — This entry places the *New Inventory* on the work sheet as an asset, and at the same time the credit to the *Profit and Loss Summary* reduces the cost of goods sold.

Entries 2, 3, and 4. — These entries were written to increase the reserves as directed. In each case the student should note on the work sheet that provision for *Bad Debts*, and the *Depreciation* accounts have been added to monthly but have not been closed.

Entry 5. — This entry was written to reduce the current value of prepaid advertising. Since the contract in amount of $1600.00 covered the months of June, July, and August, and was paid in June, then three-quarters of this prepaid advertising should be deferred. A study of the *Advertising* account on the work sheet would indicate that evidently $2000.00 worth of advertising had expired during the past five months, and a new contract purchased for June and the next three months.

Entry 6. — This entry adjusts the *Prepaid Insurance* account in a manner similar to that used for *Prepaid Advertising* above.

Entry 7. — This entry is written so that June will be charged with its share of taxes, and so that *Prepaid Taxes* account may be reduced accordingly.

Entry 8. — The eighth entry is written so that June will be credited with its share of rental income, and so that *Rentals Received in Advance* may be reduced accordingly.

Entry 9. — This entry is written to charge the salesmen's salaries and general office salaries with the respective accrued salaries, and to show the liability for *Accrued Wages Payable.*

Entry 10. — The purpose of this entry is to credit June *Interest Income* with $26.00 earned in June, but which will be collected subsequently.

Entry 11. — The last adjustment entry charges June interest expense with $15.00, the *Interest Accrued on Notes Payable.*

COMPLETION OF THE WORK SHEET

After the adjustment entries have been placed on the work sheet, the next step is to consolidate the first four columns into the *Trial Balance After Adjustment.* Beginning students will

find that the preparation of this adjusted trial balance is helpful. It will prove, if the mechanical work has been done correctly. If the totals do not agree, the student should find his error before he proceeds. Experienced accountants often omit the *Trial Balance After Adjustment,* and as the accounts are adjusted place them directly in one of the four columns on the right where they belong. The student will do well to study carefully the placing of each account.

FINANCIAL STATEMENTS FROM COMPLETED WORK SHEET

The Profit and Loss Statement and the Balance Sheet may now be prepared from the completed work sheet. The forms are similar to those used before and are presented on the following pages to complete the demonstration.

For questions on this chapter see page 228.

THE THOMAS CLARK SUPPLY CO.

Profit and Loss Statement
For the Six Months Period Ended June 30, 19—

Gross Income from Sales			$156,000.00
Less Return Sales			300.00
Net Income from Sales			155,700.00
Deduct the Cost of Goods Sold:			
Inventory May 31		$ 60,000.00	
Add Purchases	$105,800.00		
Less Returned Purchases	500.00		
		105,300.00	
Total Merchandise, Available for Sale		165,300.00	
Less Inventory June 30		58,000.00	
Cost Of Goods Sold			107,300.00
Gross Profit on Sales			48,400.00
Deduct Expenses of Operation:			
A. *Selling Expenses:*			
Salesmen's Salaries	23,140.00		
Advertising	2,400.00		
		25,540.00	
B. *General and Administrative Expense:*			
Freight & Cartage	600.00		
General Off. Sal.	18,180.00		
Provision for Doubtful Accounts	720.00		
Depr. of Bldgs.	200.00		
Depr. of Machy. & Equip.	600.00		
Insurance	180.00		
Taxes	600.00		
		21,080.00	
Total Expenses of Operation			46,620.00
Net Profit from Operations			1,780.00
Add Non-Operating Income:			
Purchase Discounts		1,200.00	
Interest Income		520.00	
Rental Income		1,200.00	
		2,920.00	
Less:			
Sales Discounts	335.00		
Interest Expense	900.00	1,235.00	1,685.00
Net Profit for the Period			$ 3,465.00

Balance Sheet
As of June 30, 194—

ASSETS			
Current Assets			
Cash		$ 3,000.00	
Accounts Receivable	$12,000.00		
Less Res. Doubt. Accts.	720.00		
		11,280.00	
Inventory		58,000.00	
Temporary Investments	2,000.00		
Accrued Interest	20.00		
		2,020.00	
Total Current Assets			$ 74,300.00
Fixed Assets			
Land		8,000.00	
Buildings	20,000.00		
Less Deprec. Res.	900.00		
		19,100.00	
Machinery & Equipment	12,000.00		
Less Deprec. Res.	2,900.00		
		9,100.00	
Total Fixed Assets			36,200.00
Deferred Charges			
Prepaid Advertising		1,200.00	
Prepaid Insurance		180.00	
Prepaid Taxes		1,100.00	
Total Deferred Charges			2,480.00
Total Assets			$112,980.00
LIABILITIES AND NET WORTH			
Current Liabilities			
Accounts Payable		$34,000.00	
Notes Payable	$10,000.00		
Accrued Interest	15.00	10,015.00	
Rentals Received in Advance		600.00	
Salaries Accrued		320.00	
Total Current Liabilities			$ 44,935.00
Net Worth			
Thomas Clark	67,580.00		
Less Drawings	3,000.00		
		64,580.00	
Add Net Profit for Period		3,465.00	
			68,045.00
Total Liabilities and Net Worth			$112,980.00

PROBLEM MATERIAL

PROBLEM 1

The G. G. Hill Company, a sole proprietorship, has had quarterly financial statements prepared from a series of Work Sheets. The general ledger reveals the following balances at December 31st:

Land	$ 5,000.00	
Buildings	25,000.00	
Res. for Dep. of Buildings		$ 2,375.00
Delivery Equipment	8,000.00	
Res. for Dep. of Delivery Equip.		1,560.00
Purchases	110,568.72	
Sales		146,928.60
Salesmen's Salaries	13,000.00	
General Office Salaries	7,480.00	
Cash	17,240.38	
Accounts Receivable	31,720.10	
Notes Receivable	16,840.25	
Reserve for Doubtful Accounts		634.20
Notes Payable		12,500.00
Purchase Discounts		1,245.00
Sales Discounts	1,184.00	
Interest Expense	240.00	
Interest Income		184.00
Prepaid Insurance	1,640.00	
Prepaid Advertising	3,200.00	
Rental Income		1,100.00
Rentals Collected In Advance		1,800.00
Advertising Expense	2,600.00	
Insurance Expense	820.00	
Taxes	796.00	
Accrued Interest Receivable	114.00	
Accrued Interest Payable		80.00
Mortgage Payable		18,000.00
Accounts Payable		26,840.40
G. Hill Capital		59,001.50
Profit & Loss Summary		
Provision for Doubtful Accounts	1,219.60	
Depreciation of Buildings	375.00	
Depreciation of Delivery Equipment	600.00	
Inventory October 1	24,610.65	
	$272,248.70	$272,248.70

Adjustment Data:

1. The December 31 Inventory of Merchandise is valued at $28,946.74.
2. Depreciation of Buildings for the present quarter is calculated to be $125.00.
3. The Reserve for Doubtful Accounts is to be increased $284.00.

4. Depreciation of Delivery Equipment for the current quarter is calculated to be $500.00.
5. The present unexpired value of the Advertising Contract is $2400.00.
6. The Prepaid Insurance at December 31 is calculated at $1440.00.
7. Taxes are prepaid in amount of $124.00.
8. Accrued Salaries are as follows: Salesmen $165; General Office $180.
9. The Rentals Collected in Advance amount to $1400.00.
10. Interest to be accrued for the current quarter on Notes Receivable $66.00, on Notes Payable $142.00, and on Mortgage Payable $400.00.

Required:

(1) Given the foregoing trial balance and adjustment data, prepare an accountant's work sheet.

(2) From the work sheet prepare a profit and loss statement and a balance sheet.

PROBLEM 2

Mr. John Stark operates the John Stark Trading Co., and in addition publishes a trade journal. Financial statements are prepared monthly and the books closed semi-annually. The following trial balance was taken from the records as of June 30, 19—.

Cash	$ 4,326.70	
Notes Receivable	2,000.00	
Accounts Receivable	17,840.60	
Res. for Doubtful Accounts		$ 464.00
Inventory Jan. 1	20,480.00	
Purchases	142,816.75	
Sales		180,680.00
Sales Returns	1,250.00	
Land	6,000.00	
Buildings & Equipment	40,000.00	
Delivery Equipment	8,400.00	
Depreciation of Del. Equip.	700.00	
Res. for Dep. of Buildings		1,836.00
Res. for Dep. of Del. Equip.		3,360.00
Depreciation of Buildings	300.00	
Prepaid Advertising	2,000.00	
Advertising Expense	1,000.00	
Prepaid Insurance	780.00	
Insurance Expense	300.00	
Salesmen's Salaries	14,280.20	
General Office Salaries	12,460.00	
Taxes	100.00	
Prepaid Taxes	140.00	
Mortgage Payable		25,000.00
Notes Payable (Long Term)		12,500.00

Accounts Payable		$ 22,560.25
Interest Expense	$ 640.00	
Interest Income		50.00
Subscriptions Income		1,000.00
Subscriptions Collected in Advance .		3,684.00
Notes Payable (Bank)		3,000.00
John Stark Capital		21,680.00
	$275,814.25	$275,814.25

Adjustment Data:

1. The Merchandise Inventory on hand June 30 is valued at $21,948.00.
2. Monthly depreciation charges are $60.00 for buildings and $140.00 for delivery equipment.
3. Salesmen's Salaries in amount of $246.00 and General Office Salaries of $194.00 are to be accrued.
4. The Prepaid Insurance is valued at $600.00.
5. The Prepaid Advertising is valued at $1800.00.
6. Prepaid Taxes are now valued at $120.00.
7. Interest is to be accrued as follows: On Mortgage $125.00; on Notes Payable $62.50; on Notes Receivable $20.00.
8. The current month is entitled to $320.00 Subscriptions Income.
9. The Reserve for Doubtful Accounts was considered ample.

Required:

(1) Given the foregoing trial balance and adjustment data, prepare an accountant's work sheet.

(2) From the work sheet prepare a profit and loss statement and a balance sheet.

QUESTIONS ON THE CHAPTER

1. (*a*) What do you understand by a *reversal entry?*

(*b*) Explain how " accrued salaries " are reversed.

2. (*a*) Explain how unexpired insurance is placed on the books when the records are kept on the cash basis.

(*b*) How is this reversed? Why?

3. Explain how prepaid advertising can be recorded on the books without the use of reversal entries. Give complete case; including the original purchase of the advertising; and the periodic charge to expense.

4. Explain how rentals received in advance may be recorded in the records when statements are prepared monthly. Give a complete explanation and illustration.

5. Give a complete illustration of subscriptions received in advance and of how this income is gradually absorbed over the subscription period.

CHAPTER XIV

PARTNERSHIP ACCOUNTING — INTRODUCTION, FORMATION, AND DIVISION OF PROFITS

INTRODUCTION

The work of this text thus far has been confined to accounting for the single proprietor. None of the problems brought into being by the corporate or partnership forms of business organization have been considered. The next few chapters will discuss the accounting required by both of these forms of organization.

It might be well at this time, therefore, to contrast the three principal forms of business organization: the single proprietorship, the partnership, and the corporation.

THE SINGLE PROPRIETORSHIP

The single proprietorship form of business organization by its name indicates that the ownership of the business is vested in one person. No legal requirements are imposed upon one wishing to assume full liability for the debts of the business, and, should the assets of the business be insufficient to pay the creditors in full, the personal estate of the sole proprietor may be used to satisfy the business liabilities. Thus we see in the sole proprietorship form of organization unlimited liability. This is probably the weakest point and the strongest argument against the single proprietorship form of organization.

Two other arguments against this form of organization are: (1) the fact that the amount of capital a single individual can command is limited; and (2) that the death of the proprietor automatically terminates the business. This form of organization, however, best meets the need of the small business man, because it is so easy to start, and also to leave, if satisfactory results are not forthcoming. The management is in complete control of the owner; he can mold the business as he likes. He is the chief in command and can hire and fire and dictate any other policies he likes. Therefore, despite the weaknesses

mentioned, we find thousands upon thousands of men and women entering business as sole proprietors. This form of organization today is the most common, and as far as numbers of organizations are concerned is by far the largest.

THE PARTNERSHIP

To correct some of the weaknesses of the single proprietorship form of organization the partnership form is very often resorted to. The ownership will be divided between two or more; and, while this takes any sole command and absolute supremacy from the single proprietor, he is rewarded by the fact that the new firm can usually command more capital and the new partners can be counted on to aid in the management of the enterprise. The disadvantages of the single proprietory form of organization are not overcome. The unlimited liability is even extended. The debts of the partnership must be satisfied, even to the extent of the partners' personal estates, should the business assets not prove sufficient. Creditors may sue any or all partners for the firm's debts, and quite often when one partner has a stronger personal estate than the others, creditors will collect the entire sum due from the richest partner. The partners then must settle between themselves, and should the others have nothing, then the partner who paid the claims will have to stand the entire loss himself.

Thus we see that partners are jointly and severally liable for the debts of the firm, and, should the business assets be insufficient to meet the debts of the firm, the personal estates of the partners may be attached to meet any deficit. This is the weakest point of the partnership form of organization; and, today, although many new partnerships are being organized, the number is declining; and many single proprietors wishing to expand, instead of looking for partners to aid, will go one step further into the corporate form of organization.

Another outstanding weakness is the fact that the death of any partner automatically dissolves the partnership; and, while the remaining partner or partners may continue, a reorganization is necessary and many problems must be settled at this time.

The ease of formation and the fact that no outside control will be exercised, as is the case with the corporation, and that

no special tax will be levied on the partnership as such, as the corporation is taxed, keep this form of organization popular where slight expansion is desired.

THE CORPORATION

The corporate form of organization was devised to meet the defects of both these types of organization. It remedies all of the weaknesses and adds several attractive features. The ownership may be divided almost indefinitely by means of transferable shares, thus making possible large aggregate capital.

The corporation, too, stands as a separate legal entity and may act as an individual person. It may enter into contracts in the corporation's name, and it may sue or be sued in the corporate name. The chief feature, probably, is the fact that stockholders, the real owners of the corporation, have no further liability after their stock subscriptions are paid. This freedom from unlimited liability, which is the principal weakness of the other two forms of business organization, makes the corporation the ideal form of organization for large business. The corporate form possesses several other advantages as well as certain weaknesses. Further consideration of the corporation shall be deferred, however, until we reach the chapter devoted to this most interesting phase of accounting.

FORMATION OF A PARTNERSHIP

It was said in the introduction that one of the weaknesses of the sole proprietorship form of business organization is the limitation of capital. This defect can be remedied by seeking a partner who is willing and able to aid in the business by combining his services and capital in form of a partnership.

It was also said in the introduction that no particular legal requirements were imposed upon those contemplating the formation of a partnership; and, although this is true, once organized, there is a code of law designed particularly to help manage this form of business organization.

It is necessary that one entering into a partnership be familiar with the law of partnerships. The scope of this text prevents a lengthy discussion of this interesting subject and only a few legal facts will be mentioned.

The law which governs partnerships is State law and many States have codified this law. Prior to 1914, the law in several States differed, and the resulting conflict caused a great deal of confusion. In 1914 the National Conference of Commissioners on Uniform State Laws caused a uniform law on partnership to be prepared. This same commission had, beside "The Uniform Partnership Act," "The Uniform Limited Partnership Act" drawn up and presented to the various States of the union for their consideration. At the present time the majority of States have adopted the uniform act in its entirety or have adopted most of the act in codes of their own.

PARTNERSHIP DEFINED

The Uniform Partnership Act defines a partnership as "an association of two or more persons to carry on as co-owners a business for profit."

Another good definition is taken from Professor Mechem who says: "Partnership may be tentatively defined as a legal relation based upon the express or implied agreement of two or more competent persons whereby they unite their property, labor or skill in carrying on some lawful business as principals for their joint profit." (Mechem, *Partnership* 2nd Ed. Sec. 1.)

From these two definitions we may say that the following are the elements of partnership:

1. Partnership is the result of an agreement (expressed or implied).
2. Parties to the agreement must be competent to contract.
3. The partnership is formed for a profit, and must have a legal purpose.
4. The partners generally contribute money, property, labor, or skill.

In organizing a partnership these elements should be kept in mind.

PRELIMINARIES TO FORMATION OF PARTNERSHIP

When a partnership is contemplated several preliminary matters must be taken care of.

First, the books of the single proprietor should be closed out and a balance sheet and profit and loss statement provided. These will be required in order that the new partner may know

the financial condition of the business he contemplates entering, and for several other uses as we shall presently see.

ARTICLES OF CO-PARTNERSHIP

After preliminary negotiations have been completed, a partnership agreement should be drawn up. This agreement or contract is a very important part in the organization of a partnership. A partnership can come into existence without any written evidence of the fact, but such procedure is not wise, as many controversies and future differences of opinion can be avoided if the proper agreement is drawn at the start.

It is also wise to employ some experienced party to aid in the drawing of this important paper, for, although anyone may draw it, the services of an experienced lawyer may be a good investment at this time.

The partnership agreement should be drawn to meet the individual needs of the partners and each partnership will usually present many different problems. However, there are certain points which every good set of Articles should contain, and at this time a few of the most important are listed.

IMPORTANT POINTS TO BE INCLUDED IN A PARTNERSHIP AGREEMENT

(1) Names and addresses of the partners.
(2) The partnership firm name.
(3) The date of commencement.
(4) The location.
(5) Capital contributions.
  (*a*) Total to be invested by each partner.
  (*b*) The make-up of the investment (i.e., cash or other assets).
  (*c*) Date each part of the investment is to be made, if entire investment is not to be received by the business at one time.
(6) Interest, if any, to be allowed on partners' capital.
(7) Salaries, if any, to be paid to partners.
(8) Drawings:
  Limitations: penalties for overdrawing, such as interest charge, etc.
(9) Duties of each partner:
  These should be clearly defined, however, with enough flexibility for each to know they are still co-owners.

(10) Accounting periods should be fixed and policy regarding regular auditing settled.

(11) Basis of profit sharing:

This is important because in absence of any agreement the law says profits and losses are to be shared equally by partners.

(12) Duration of the partnership and method of dissolution.

Another most important phase of partnership, which, if properly provided for in the partnership agreement, may avoid future trouble with regard to such matters as conditions under which dissolution may take place prior to the fixed term, and manner of settlement with deceased partner's estate including the valuation of good-will at the time of dissolution.

After the Articles of Co-partnership have been agreed upon and signed, the accountant should prepare the books of record. One of the first things he should do at this time is to read and familiarize himself thoroughly with the partnership agreement. It is wise to have a copy of the Articles of Co-partnership pasted into the general journal.

The next thing the accountant should do is to record the assets and liabilities contributed by the various partners. All property, real and personal, contributed by the partners, loses its former identity as belonging to the individual partners and becomes the property of the firm.

The record required will take the form of journal entries and will be written into the General Journal directly following the Articles of Co-partnership. The forms these journal entries would take under several typical cases are illustrated here below.

Case No. 1

Suppose A and B form a partnership, each partner contributing his total investment in cash. Say A contributes $8000.00 and B contributes $10,000.00 January 2.

After the record of the partnership agreement has been written (which for brevity's sake will be omitted in all illustrations), the following journal entry will be made:

Cash	√	$ 8,000.00	
A Capital Account			$ 8,000.00
To record A's investment in the A and B partnership.			

Cash	√	$10,000.00	
B Capital Account			$10,000.00
To record B's investment in the A and B partnership.			

When these entries have been posted to the ledger the accounts would look as follows:

CASH

Jan. 2		$ 8,000.00			
		10,000.00			

A — CAPITAL

			Jan. 2	Investment	$ 8,000.00

B — CAPITAL

			Jan. 2	Investment	$10,000.00

This is the simplest case and needs practically no explanation. The $18,000.00 received by the business should be deposited in the bank to the account of the A and B partnership. This amount should also be written into the cash receipts book in the appropriate money columns, so that the cash balance will be available in that book. In entering the cash balance in both journals care must be taken to prevent double posting. This may be avoided by the use of a check mark in the folio columns of both books, in the journal against *Cash,* and in the cash book against the two capital accounts.

Case No. 2

In this illustration let us suppose both A and B contribute several assets each, as follows: A, Cash $3000.00, a stock of merchandise valued at $2000.00, and an auto delivery truck which is valued at $1800.00; B, Cash $2800.00, the complete equipment for an office which is valued at $960.00, a stock of

merchandise which is valued at $2860.00, and a note receivable for $500.00. The following journal entries will open the books of the new partnership.

General Journal

January 2

Cash	√	$3000.00	
Inventory, Merchandise		2000.00	
Delivery Truck		1800.00	
A, Capital			$6800.00
To record A's investment in the A and B partnership, as per agreement above.			
Cash	√	2800.00	
Inventory, Merchandise		2860.00	
Office Equipment		960.00	
Notes Receivable		500.00	
B, Capital			7120.00
To record B's investment in the A and B partnership, as per agreement above.			

After the entries above have been posted, a balance sheet prepared from the ledger of the A and B Partnership would look as follows:

A and B

Balance Sheet as of January 2

Assets		*Liabilities*	
Cash	$ 5,800.00	None	
Notes Receivable	500.00		
Inventory	4,860.00	*Net Worth*	
Auto Truck	1,800.00	A, Capital	$ 6,800.00
Office Equipment	960.00	B, Capital	7,120.00
	$13,920.00		$13,920.00

This case is somewhat similar to the first, the only difference being that, whereas in the first case only cash was invested by the partners, in this case each contributed several assets. The form of journal entry will be the same, a debit to the assets received and a credit to each partner for the total amount of his net investment. Note again the check marks in the journal folio columns. These check marks, as mentioned before, are to

prevent double posting, when the cash invested by the partners is also entered in the cash receipts journal.

Case No. 3

Suppose that A, who conducts a wholesale drug business, and B, who is in the same line of business, agree to form a partnership in order to eliminate competition, and effect other economies. A is to move all of his assets to the premises owned by B, which is large enough to take care of the contemplated expansion. Suppose as a basis of the partnership that the following balance sheets are mutually agreed upon.

A. WHOLESALE DRUG STORE

Balance Sheet as of December 31

Assets		*Liabilities*	
Cash	$16,200.00	Notes Payable	$ 4,500.00
Notes Receivable	3,400.00	Accounts Payable	15,750.00
Accounts Receivable	7,280.00	*Total Liabilities*	$20,250.00
Inventory	15,420.00		
Laboratory Equipment	3,000.00	*Net Worth*	
Delivery Equipment	4,000.00	A, Capital	29,050.00
	$49,300.00		$49,300.00

B. WHOLESALE DRUG STORE

Balance Sheet as of December 31

Assets		*Liabilities*	
Cash	$ 3,420.00	Notes Payable	$ 5,000.00
Notes Receivable	4,000.00	Accounts Payable	12,800.00
Accounts Receivable	11,320.00	Mortgage Payable	6,000.00
Inventory	15,640.00	*Total Liabilities*	$23,800.00
Land & Buildings	10,000.00		
Laboratory Equipment	5,000.00	*Net Worth*	
Delivery Equipment	6,000.00	B, Capital	31,580.00
	$55,380.00		$55,380.00

The following journal entries will be necessary to open the new books of the partnership.

Cash	√	$16,200.00
Notes Receivable		3,400.00
Accounts Receivable		7,280.00
Inventory		15,420.00

Laboratory Equipment	$ 3,000.00	
Delivery Equipment	4,000.00	
Notes Payable		$ 4,500.00
Accounts Payable		15,750.00
A, Capital Account		29,050.00
To record the receipt of assets contributed and liabilities assumed by the A and B partnership, the contribution of A as per agreement.		

Cash	√ $ 3,420.00	
Notes Receivable	4,000.00	
Accounts Receivable	11,320.00	
Inventory	15,640.00	
Land & Buildings	10,000.00	
Laboratory Equipment	5,000.00	
Delivery Equipment	6,000.00	
Notes Payable		$ 5,000.00
Accounts Payable		12,800.00
Mortgage Payable		6,000.00
B, Capital Account		31,580.00
To record the receipt of assets contributed and liabilities assumed by the A and B partnership, the contribution of B as per agreement.		

After the journal entries have been posted, a partnership balance sheet may be prepared as follows:

A AND B WHOLESALE DRUGGISTS

Balance Sheet as of January 2

Assets		*Liabilities and Capital*	
Cash	$ 19,620.00	Notes Payable	$ 9,500.00
Notes Receivable	7,400.00	Accounts Payable	28,550.00
Accounts Receivable	18,600.00	Mortgage Payable	6,000.00
Inventory	31,060.00	*Total Liabilities*	$ 44,050.00
Laboratory Equipment	8,000.00		
Land and Buildings	10,000.00	*Net Worth*	
Delivery Equipment	10,000.00	A, Capital	29,050.00
		B, Capital	31,580.00
	$104,680.00		$104,680.00

This case is the usual one when two going concerns unite in the partnership form of organization. Very frequently the corporate form of organization might be resorted to in a case like this.

As in the two preceding instances, the cash contributed by

the partners should be entered also in the cash receipts book and checked in the journal as before.

Note also on the partnership balance sheet that the property contributed by the two partners is merged. This is characteristic of property brought into the partnership. Property contributed by partners loses its former identity and belongs to the partnership, rather than to the partners individually. Each partner has control over the entire assets of the partnership, and can, in the usual course of the business, buy, sell, and act in every other capacity necessary to carry on the partnership business. The partnership agreement may limit the duties of the partners; and, when such an agreement is present, that, of course, rules and governs the actions of each partner.

Partners act for the partnership in all their dealings very much as agents, and the law of agency governs much of the partners' actions. "Every partner is an agent of the partnership for the purpose of its business — etc." Uniform Partnership Act, Sec. 9 (1).

Not every act of a partner, however, is binding upon his copartner any more than every act of an agent is binding on his principal.

This last sentence may seem to limit the actions of partners, and in one sense it does. In general, any acts within the scope of the business may be performed by either, and either may bind the partnership. If, however, the acts of any partner are not within the scope of the business, then obviously the actions of one partner must be ratified by the other partners before the partnership can be bound. This is also covered in the Uniform Partnership Act, Section 9 (2). "An act of a partner which is not apparently for the carrying on of the business of the partnership in the usual way does not bind the partnership unless authorized by the other partners."

DIVISION OF PROFITS

A very important feature in partnership acounting is that of sharing the profits or losses. The Uniform Partnership Act covers this point in Section 18, which states: "The rights and duties of the partners in relation to the partnership shall be determined, subject to any agreement between them, by the following rules: (*a*) Each partner shall . . . share equally in the

profits and surplus remaining after all liabilities, including those of the partners, are satisfied. . . ." Thus we see that in the absence of any specific agreement, profits or losses are to be shared equally. This subject, however, is usually covered by a clause in the partnership agreement and a definite method of distribution agreed upon by the partners.

In practice there are many methods of sharing profits or losses. The following methods listed, and later described, are in common use today:

VARIOUS BASES OF PROFIT DISTRIBUTION

1. Shared equally.
2. Fixed or arbitrary ratio.
3. Ratio of partners' capital.
4. According to the average capital invested over the accounting period.
5. Interest on capital invested, before profits are distributed.
6. Salaries as a division of profits.
7. Combination of methods listed above.

Each of these bases of profit and loss distribution is discussed below.

1. PROFITS OR LOSSES — SHARED EQUALLY

When the partners' capital investments are equal, or where some other equalizing factors are present, there probably is no fairer way to distribute the profit or loss accruing to a partnership than by an equal division. When this condition prevails, a clause specifying the equal division of profits or losses should be included in the partnership agreement, even though the omission of such an agreement would result in the same division. The advantage of including such a clause is that the question of distribution of profits or losses is settled by mutual agreement and the possibility of friction on this point is eliminated.

The method of accounting for such a division is very simple. The following case is given for the sake of completeness. Suppose A, B, and C, whose capital investments in the "ABC" partnership are equal, are to share in a $6000.00 profit earned during the year ended December 31, 19—.

The following entry will accomplish this:

GENERAL JOURNAL

Profit and Loss	$6000.00	
A, Capital		$2000.00
B, Capital		2000.00
C, Capital		2000.00
To distribute in three equal shares the net profit for the year ended December 31, 19—.		

When this entry has been posted, the capital accounts of the partners will appear as follows:

A — CAPITAL

		Balance	$10,000.00
		December $\frac{1}{3}$ net profit for year	2,000.00

B — CAPITAL

		Balance	$10,000.00
		December $\frac{1}{3}$ net profit for year	2,000.00

C — CAPITAL

		Balance	$10,000.00
		December $\frac{1}{3}$ net profit for year	2,000.00

2. FIXED OR ARBITRARY RATIO

Very often, even though the amounts of cash invested by the partners be equal, partners will agree to allow one partner to draw a larger share in the profits than the others. This condition of affairs will come about when the other elements of their investment, such as skill, which is hard to measure, are unequal. Because this or other similar factors are hard to gauge, it becomes necessary for partners to agree upon a fixed ratio for dividing profits.

Let us assume, therefore, that A and B members of the AB partnership have each invested $10,000.00 in a business, but because of A's particular knowledge and skill in this particular

business, he is to be given 60% of all profits, while B is to receive 40%. Let us suppose further that at December 31 there is a profit of $8000.00 to be divided on this ratio. The following journal entry will carry out the agreement:

GENERAL JOURNAL

Profit and Loss	$8000.00	
"A" Capital		$4800.00
"B" Capital		3200.00
To record the division of $8000.00, the net profit for the year, 60 per cent to A and 40 per cent to B.		

When this entry is posted the capital accounts will look as follows:

A — CAPITAL

	Balance	$10,000.00
	December, 60 per cent of net profit	4,800.00

B — CAPITAL

	Balance	$10,000.00
	December, 40 per cent of net profit	3,200.00

3. RATIO OF PARTNERS' CAPITAL

This method of dividing profits or losses is used quite frequently where cash investments are unequal, and where no other factors need be considered. Apportioning profits according to the amounts of capital invested, under these circumstances, is a very equitable method of distribution.

Let us assume, as an example under this method, that A has invested $12,000.00, B $10,000.00, and C $15,000.00, and at the end of the year the firm has a $14,800.00 profit to be divided.

Under this method the combined capital fund is found, and then the ratio each partner's investment bears to the total is ascertained as follows:

A's Capital	$12,000.00
B's Capital	10,000.00
C's Capital	15,000.00
	$37,000.00

A's Capital, \$12,000.00, bears the ratio to the total \$37,000.00 as twelve bears to thirty-seven; therefore under this method of distribution A will receive 12/37 of the total, B 10/37, and C 15/37.

The following journal entry will divide the profit according to the ratio above:

GENERAL JOURNAL

Profit and Loss	\$14,800.00	
A Capital		\$ 4,800.00
B Capital		4,000.00
C Capital		6,000.00
To apportion the net profit for 19— to the partners A, 12/37; B, 10/37; C, 15/37.		

After the journal entry above has been posted, the capital accounts of the partners will be as follows:

A — CAPITAL

	Balance	\$12,000.00
	December, $\frac{12}{37}$ profit for year	4,800.00

B — CAPITAL

	Balance	\$10,000.00
	December, $\frac{10}{37}$ profit for year	4,000.00

C — CAPITAL

	Balance	\$15,000.00
	December, $\frac{15}{37}$ profit for year	6,000.00

The distribution above is based on the capital invested by the partners at the beginning of the period; and, should any additions of capital or deductions from capital be made during the period, these should be recorded in separate drawing accounts. It is also an excellent idea, when such an agreement is in force, to limit the drawings allowed any one partner.

4. AVERAGE CAPITAL RATIO

When the amounts invested by the partners do not remain constant, but fluctuate because of additions or withdrawals of capital made during the period, it is more difficult to arrive at an equitable basis of profit distribution. By the average capital ratio method, the average capital invested by each partner is compared to the total average capital of all partners. In using this method two elements must be considered: first, the amount, and second, the length of time the amount remains invested. In doing this, the amounts invested must be brought on to a common base such as a day or a month and then the time element may be eliminated.

To illustrate, let us assume the following facts:

That A's capital account December 31, 19— was as follows:

A — Capital

July 30	Withdrawal	$2,000.00	June 30	Balance	$10,000.00
			Sept. 30	Add. Inv.	1,000.00

B — Capital

Aug. 30	Withdrawal	$4,000.00	June 30	Balance	$12,000.00
			Nov. 30	Add. Inv.	1,000.00

From these two capital accounts we may say that A had:

$10,000 invested for	1 mo.	(June 30–July 30)	1 × $10,000 =	$10,000
8,000 invested for	2 mos.	(July 30–Sept. 30)	2 × 8,000 =	16,000
9,000 invested for	3 mos.	(Sept. 30–Dec. 31)	3 × 9,000 =	27,000
	6 mos.		Month Dollars	$53,000

and from B's capital account we may say he had:

$12,000 invested for	2 mos.	(June 30–Aug. 30)	2 × $12,000 =	$24,000
8,000 invested for	3 mos.	(Aug. 30–Nov. 30)	3 × 8,000 =	24,000
9,000 invested for	1 mo.	(Nov. 30–Dec. 31)	1 × 9,000 =	9,000
	6 mos.		Month Dollars	$57,000

As a basis of comparison we shall add the 53,000 month dollars invested by A to the 57,000 month dollars invested by B. We can now compare A's and B's investments to the total contributed by both, 110,000 month dollars.

We may say A had $\frac{53,000.00}{110,000.00}$ of the total or $\frac{53}{110}$

and B had $\frac{57,000.00}{110,000.00}$ or $\frac{57}{110}$

If we assume a profit of \$5,500.00,

A should receive: $\frac{53}{110} \times 5,500 = \$2,650.00$, and

B should receive: $\frac{57}{110} \times 5,500 = \$2,850.00$.

In the distribution above the calculations have been purposely simplified. The principles involved, however, would remain the same regardless of how complex the problem might be, due to any changes in the facts. In actual practice, for example, additional investments or withdrawals probably would not be made on thè even date, so that the unit months could not be used as a basis. It would be necessary to calculate the number of days each investment remained undisturbed, which would merely make the resulting fractions larger. Another brief example, using days as a base, is now given. Suppose the following is the condition of A's and B's *Capital* accounts on December 31, 19— and that they wish \$4000.00 to be divided according to the average capital investment of each.

A — Capital

October 4	\$2,000.00	June 30	\$10,000.00

B — Capital

		June 30	\$12,000.00
		Aug. 7	3,000.00

From the *Capital* accounts above we may say that A had:

\$10,000 invested 96 days	(June 30–Oct. 4)	96 × \$10,000 =	\$ 960,000
8,000 invested 88 days	(Oct. 4–Dec. 31)	88 × 8,000 =	704,000
	days	184	\$1,664,000

This would give A an average investment over the six months of (\$1,664,000 ÷ 184) or \$9,043.48.

And from B's *Capital* account we may say he had:

$12,000 invested	38 days (June 30–Aug. 7)	38 × $12,000 =	$ 456,000
15,000 invested	146 days (Aug. 7–Dec. 31)	146 × 15,000 =	2,190,000
	days	184	$2,646,000

This would give B an average investment over the six months of (2,646,000 ÷ 184) or $14,380.43.

It would now be possible to compare A's and B's average capital to the combined average capital. If we were to do this,

$$\text{A would receive: } \frac{904{,}348}{2{,}342{,}391} \times \$4000, \text{ and}$$

$$\text{B would receive: } \frac{1{,}438{,}043}{2{,}342{,}391} \times \$4000.$$

However, these are very unwieldy fractions and may be avoided by adding the total day dollars invested by A and B ($1,664,000 + $2,646,000 = $4,310,000) and making our comparison on the totals rather than on the daily average. By this method (omitting the final three ciphers):

$$\text{A would receive: } \frac{1664}{4310} \times \$4000 = \$1544.32, \text{ and}$$

$$\text{B would receive: } \frac{2646}{4310} \times \$4000 = \$2455.68.$$

The principal involved in both cases is the same, the only difference being in the longer arithmetical calculation usually caused by the larger fraction when days are used instead of months.

5. INTEREST ON CAPITAL INVESTED, BEFORE PROFITS ARE DISTRIBUTED

Sometimes in a partnership, where the capital investments of the partners are unequal, an agreement will be made to allow the partners a fixed rate of interest on their capital before profits are distributed. When this arrangement is in operation, the interest is calculated on the amount invested minus the interest on any withdrawals. *The charge for interest on partners' capital is not an ordinary revenue expenditure, such as interest on notes payable, but is to be considered as a distribution of part of the profits.*

After the interest has been allowed, the balance of the profit is usually distributed on a fixed ratio.

For example, let us suppose A, B, and C are partners, and have invested respectively $8000.00, $10,000.00 and $12,000.00, and they agree that each shall receive 6 per cent per annum on his investment, and any further profit or loss is to be distributed equally among the partners.

In carrying out this agreement, let us assume first a profit of $6000.00 at the end of the year.

The total interest to be paid the partners will amount to $1800.00 and the balance $4200.00 will be divided equally.

The following general journal entries will be required:

Profit and Loss	$1800.00	
A Capital		$ 480.00
B Capital		600.00
C Capital		720.00
To credit the partners with 6 per cent interest on the amount of their respective investments.		

Profit and Loss	$4200.00	
A Capital		$1400.00
B Capital		1400.00
C Capital		1400.00
To credit the partners with equal shares of the net profit.		

After these entries have been posted, the *Capital* accounts will appear as follows:

A — Capital

	Jan. 2	Balance	$8,000.00
	Dec. 31	Interest	480.00
		$\frac{1}{3}$ profit	1,400.00

B — Capital

	Jan. 2	Balance	$10,000.00
	Dec. 31	Interest	600.00
		$\frac{1}{3}$ profit	1,400.00

C — Capital

	Jan. 2	Balance	$12,000.00
	Dec. 31	Interest	720.00
		$\frac{1}{3}$ profit	1,400.00

Let us suppose the facts are the same as in the case above, except that the profit before the interest is distributed is only $1500.00. The interest will be distributed as before, changing the former profit to a loss of $300.00. This loss should now be divided equally among the partners as follows:

A Capital	$ 100.00	
B Capital	100.00	
C Capital	100.00	
Profit and Loss		$ 300.00
To charge the partners with the net loss for the period.		

It will be noted that, relatively, the partners are treated the same in both cases. The interest to be allowed is credited to each partner according to the agreement and any balance remaining, or loss resulting, is divided equally. In many instances, where an agreement to allow interest on partner's capital is in operation, the balance will be shared on some other arbitrary ratio. For example, let us suppose the same facts as before, but that after interest has been divided any profit or loss remaining shall be shared A, 30 per cent; B, 50 per cent; and C, 20 per cent.

To carry this arrangement into effect the second journal entry would be as follows:

General Journal

Profit and Loss	$4200.00	
A Capital		$1260.00
B Capital		2100.00
C Capital		840.00
To divide the $4200.00 profit remaining after interest has been credited, A 30 per cent; B 50 per cent, and C 20 per cent.		

This sort of agreement will be entered into when the partners contribute services, skill, or labor in the partnership organization in varying degrees.

6. SALARIES AS DIVISION OF PROFITS

Quite often in the articles of co-partnership the partners will mutually agree to permit salaries to be paid as a division of

profits. This arrangement is quite popular in the smaller partnerships, when it is not convenient for the partners to wait until the end of the accounting period for their compensation in the form of a distribution of profits. They will, therefore, be granted a certain salary per week or month, and the balance of the profit or loss shared on some other basis. Sometimes a salary will be granted to one or more partners, and not to others, as a means of compensating such partners for particular services rendered the firm, where, for example, one partner runs the entire partnership business while the others contribute relatively no services.

In every instance, when a salary is granted to partners, such arrangement is entirely within the law, and salaries may be paid as long as the business is solvent. It must be remembered, however, that *the salary is a division of the profits; and, should a loss result after salaries have been paid, such a loss must be borne by the partners on the profit and loss sharing ratio.* If the firm is insolvent any salaries due partners should be canceled, because, under such circumstances, partners' salaries cannot be treated as a firm liability, such as *Salaries Due to Employees* are considered. Assuming the following facts, two cases will now be given to illustrate the payment of salary as a division of the profit. Suppose the A–B–C partnership has an agreement whereby A is to be paid $120.00 a month beside a $\frac{1}{3}$ share in the remaining profits, B is to receive $300.00 a month beside a $\frac{1}{3}$ share in the remaining profits, while C, who is not actively engaged in the enterprise, is to share only in the profits, receiving the remaining $\frac{1}{3}$ after A and B have received their salaries.

Case No. 1

Assume a profit of $11,040.00 for the year. A's salary account shows a debit balance of $1,440.00 and B's a debit of $3600.00. After the two salary accounts are closed, the net profit will be $6000.00, which, according to the partnership agreement above, will be divided equally, $2000.00 to each.

Case No. 2

Let us assume in this case a profit of only $2040.00 for the year.

A's salary account again has a debit of $1440.00 and B's

$3600.00. Let us further assume the partnership A–B–C is still solvent.

After the two partners' salary accounts have been closed to the *Profit and Loss* account, a debit balance of $3000.00 will result, indicating a loss of that amount for the period.

This loss must now be absorbed by A, B, and C, according to their profit and loss sharing ratio. A, B, C's *Capital* account will be charged with $1000.00 each.

The result of the two cases may now be compared. In the first case A would receive $1400.00 as salary and $2000.00 as additional profit, $3440.00 in all. In the second case the debit to his *Capital* account of $1000.00 would reduce the amount of $1440.00 he received as salary to $440.00.

B, in the first case, would receive $3600.00 as salary and $2000.00 his $\frac{1}{3}$ share of the profits. In the second case the debit of $1000.00 to his *Capital* account would reduce his net income to $2600.00.

C, in the first case, receiving no salary, would receive only $2000.00 his $\frac{1}{3}$ share of the profits. In the second case, again, he receives no salary, but does participate in the resulting net loss. His *Capital* account would therefore be decreased by $1000.00, his share of the loss.

It is hoped it will be evident from these cases that partners' salaries must be construed as a division of the profit for the period. They should not be considered with the ordinary expenses of running a business, even though the services rendered by a partner would be performed by a paid executive.

Very often, in an attempt to justify partners' salaries as one of the regular expenses of carrying on the partnership business, partners will advance the argument that if the partners did not serve in their respective capacities, hired executives or employees would, and if the latters' salaries are legitimate operating costs, so should identical services rendered by partners result in legitimate operating costs.

The unsoundness of such reasoning should be evident to the thoughtful reader; but, regardless of how one feels on this matter, the law is unquestionably against permitting such a practice.

7. COMBINATION OF METHODS

In some instances it will be desirable to combine two or more of the foregoing methods. As a combination would be made to meet individual special circumstances, no hypothetical cases need be considered.

PARTNERS' DRAWING, SALARY, AND LOAN ACCOUNTS DIFFERENTIATED

A. Partners' Drawing Accounts. — Partners may be permitted in the articles of co-partnership to make regular withdrawals against anticipated profits, or be paid a certain sum as salaries. In either case a *Drawing* or *Personal* account should be established for each partner. This account should be used to record all temporary fluctuations in the partner's capital. As a rule, a partner may not draw funds from the partnership against his original investment, without consent of the other members of the firm. This is a point which should be covered in the partnership agreement.

Current profits are usually credited to the partners' *Drawing* or *Personal* accounts. If drawings have been judiciously taken, the credits should offset the drawings and leave a credit excess. This favorable balance may be closed to the partners' *Capital* accounts, or be allowed to remain as a credit against subsequent drawings. Should a partner draw in any period an amount greater than his share of the profits, then a problem arises, — what to do with the debit balance? It may be closed to the partners' *Capital* account, reducing his investment, or if the partners do not wish to have their original investments changed, then this debit balance may be permitted to stay in the *Drawing* account. Subsequent credits from profits may balance it, or the partner may be required to make a contribution to close this unfavorable debit balance. Every set of agreements for a partnership should be specific on the point of drawings, and such agreements should be specific in setting a limit to the partners' drawing so as to prevent any partner from impairing the firm's capital. When such an agreement is in force, the accountant should be careful to see that its terms are not violated.

Another use often made of the partners' drawing account

is to record withdrawals of merchandise for personal use. These withdrawals are usually made at cost.

B. Partners' Loan Accounts. — In some articles of co-partnership, arrangements will be included to treat as *Partnership Loans* certain money advanced by a partner in excess of his agreed contribution. Such loans are treated as Loans Payable, and usually carry with them interest, which must be paid before profits are distributed, just as interest on any other firm liability. This arrangement, like partners' salaries, is wholly within the law just as long as the business is solvent; but, should the business fail, then partners' loans, in the eyes of the law, will be treated as all other capital contributions, merged to meet the firm's liabilities. As between the partners themselves, however, interest on partners' loans must be paid, even if the payment results in a net loss. Such a loss would be treated as any other loss, charged against the partners' *Capital* accounts on the agreed profit and loss sharing ratio.

As we shall see under the topic "Dissolution," as between the partners, a Loan account has precedence over partners' *Capital* accounts and must be liquidated in full before any dividend is granted to the partners for *Capital.*

QUESTIONS ON THE CHAPTER

1. List the principal advantages and disadvantages of the three major forms of business organization.

2. Why are the Articles of Co-Partnership so necessary in the formation of a partnership?

3. What law now governs partnerships in New York and New Jersey? Has this law been adopted by the majority of States in the Union?

4. Define a partnership. What are the elements of the definition?

5. What effect has the death of a partner on the continuation of the partnership business? Does it dissolve or discontinue the partnership?

6. List ten important clauses you would like to see incorporated in a model partnership agreement.

7. In a partnership formed to carry on the ordinary mercantile business can one partner sell the firm's real estate? Can he sell the entire stock of merchandise? Can he bind the partnership and his other partners to pay for the merchandise which he selects and purchases without consulting them?

8. What do you think are the principal defects of the partnership

form of organization? Under what circumstances would you advocate the formation of a partnership? And under what circumstances would you advise against forming a partnership? What type of organization would you suggest? Why?

9. Outline in brief the journal entries required to start a partnership.

10. May the executor of a deceased partner demand admission to the partnership, in order to see that the share in the business due the estate is properly safeguarded? Why?

11. What is the attitude the courts would take regarding the distribution of profits in a case between A whose *Capital* investment is $10,000.00 and B whose investment is $2000.00 in the A and B partnership?

(*a*) Providing there is no clause on this subject in the articles of co-partnership?

(*b*) Providing a clause in the partnership agreement provides A is to receive 30 per cent and B 70 per cent of all profits and losses?

12. Enumerate and briefly describe six different methods in use today to distribute partnership profits.

13. A, B, and C are forming a partnership. A agrees to contribute $8000.00; B agrees to contribute $6000.00; and C agrees to contribute $10,000.00.

A further agrees to act as traveling salesman for the new firm, covering a broad territory; B is to take full charge of the management of the enterprise except the selling; C, an attorney, will do legal work, only when required by the partnership.

Assuming the foregoing facts, write a paragraph describing the distribution of profits and earnings which you would suggest be incorporated in the articles of co-partnership. Be brief, but clear on each point.

PROBLEM MATERIAL

Problem 1

J. Cooke has operated a lumber yard as a sole proprietor for several years, and now wishes to expand his business. He invites H. Davis and C. Emory to join him as partners.

A certified public accountant has just completed an audit of the books of record of Mr. Cooke's lumber yard, which reveals the following condition.

COOKE LUMBER CO.

Balance Sheet as of October 15

Assets			*Liabilities*	
Cash in Bank		$ 6,600.80	Accounts Payable	$ 51,820.00
Cash on hand		125.00	Notes Payable	12,000.00
Accounts Receivable	$76,715.60		Mortgage Payable	15,000.00
Less Reserve	1,441.47		Wages Payable	360.00
		75,274.13	Taxes Payable	1,200.00
			Total Liabilities	$ 80,380.00
Inventory		44,300.07		
Mortgages Receivable		6,000.00	*Net Worth*	
Machinery & Equip.	$20,000.00		Mr. J. Cooke	$ 99,200.00
Less Reserve	8,000.00			
		12,000.00		
Delivery Trucks	8,400.00			
Less Reserve	1,680.00			
		6,720.00		
Land		6,000.00		
Buildings & Sheds	$24,000.00			
Less Reserve	1,440.00			
		22,560.00		
Total Assets		$179,580.00	*Total Liab. & N. W.*	$179,580.00

Mr. Davis and Mr. Emory are satisfied with the audit and accept the balance sheet prepared by the public accountant as the basis for their partnership which is to be known as the Cooke Lumber Company. Mr. Davis agrees to invest an amount of cash sufficient to make him a one-quarter owner, while Mr. Emory agrees to invest cash sufficient to give him a one-eighth interest in the new business.

Required: Assuming the partnership agreement is ratified and signed by all three members, write the entries required to place the names and investments of the new partners on the books, provided the old books are to be continued in use.

PROBLEM 2

H. Stowe has operated a wholesale provision business for some years and has at December 31, 19— the following accounts: Accounts Receivable net of doubtful accounts $42,641.00; Inventory of Provisions $26,419.00; Delivery Trucks which cost $16,000.00, against which there was a Reserve for Depreciation of $4200.00; Fixtures and Equipment cost $7200.00, against which was a Reserve for Depreciation of $2400.00; Notes Payable totaled $12,000.00, while Accounts Payable amounted to $38,720.00.

G. Thomas has also been in the wholesale provision market, and has at December 31, 19— the following accounts: Inventory $26,125.00; Land and Buildings $40,000.00, against which there is a mortgage payable of $20,000.00 and a Reserve for Depreciation of

$14,000.00; Fixtures cost $20,000.00, but against which there was a Reserve for Depreciation of $16,000.00; Delivery Equipment cost $22,000.00 and had a companion Reserve for Depreciation of $12,000.00; Accounts Payable totaled $30,625.00, while Notes Payable amounted to $10,000.00; Accounts Receivable net of bad debts were valued at $22,640.00.

Both men have, with the aid of certified public accountants, examined each other's accounts, and accept the values above as a basis for the formation of a partnership. The new firm is to bear the name of "The Stowe Thomas Provision Co.," and the partners agree to invest, in addition to the foregoing accounts, sufficient cash to make them equal partners with net investments of $40,000.00 each.

Required:

(1) How much cash must each partner invest?

(2) Draft the opening journal entries, under date of January 2, 19—.

(3) Prepare a balance sheet for the partnership as of January 2, 19—.

Problem 3

Assume the Cooke Lumber Company mentioned in Problem 1 has just completed the first year's business as a partnership, and that the audited financial statements reveal a net profit of $16,800.00.

(1) How should this profit be divided, supposing the articles of co-partnership were silent regarding profit sharing?

(2) Write the journal entries required to close the *Profit and Loss Summary* account which has a credit balance of $16,800.00, provided the partners share profits in accordance with their capital at the start of the partnership.

Problem 4

Assume the *Capital* accounts of three partners are as follows:

B. Leonard

Mar. 30	2000.00	Jan. 1 Bal.	6400.00

C. Munson

		Jan. 1 Bal.	4000.00
		June 30	2500.00

D. Nichols

May 31	2000.00	Jan. 1 Bal.	8000.00
Nov. 1	2000.00		

Required: At December 31 there is a profit of $9990.00 which is to be divided according to the average capital invested.

How much should each partner receive? Show your calculations.

Problem 5

Assume the following *Capital* accounts:

B. Oldfield

June 30	2,000.00	Jan. Bal.	10,000.00

T. Murphy

		Jan. 1 Bal.	4000.00
		Mar. 1	1000.00

The partnership agreement states that each partner shall be credited with 6% interest per annum for all monies invested and charged the same rate for all withdrawals. The balance of any profits or losses to be shared equally.

(*a*) Assume a profit for the year of $6450.00.
(*b*) Assume a profit for the year of $500.00.
(*c*) Assume a loss for the year of $370.00.

Required: Journal entries to distribute interest, gains, or losses in each case.

CHAPTER XV

PARTNERSHIPS — ADMISSION OF A NEW PARTNER AND DISSOLUTION

ADMISSION OF A NEW PARTNER: INTRODUCTION

The last chapter treated the organization of partnerships and the division of profits and losses. This chapter will treat the problems raised when a new partner is admitted, and the procedure in the dissolution or winding up of the partnership affairs, together with associated problems.

According to the law of partnership, when a new partner is admitted to an already existing partnership, the old firm is dissolved and a new firm organized. This is true even though the affairs of the old partnership are to be taken over by the new firm and, as a matter of fact, no changes contemplated. Technically, the admission of a new partner automatically dissolves the old organization, and it is necessary that a new organization be formed. This is true because of the very nature of partnerships themselves. A new partner cannot be brought into an already existing firm without the mutual consent of all the old partners. The usual procedure is to draw up a new set of articles of co-partnership or write an amendment to the old articles which must be signed by all the old members and the new members.

In either case care must be taken, in writing the articles of co-partnership, to show clearly the rights of all partners, relative to the new profit and loss sharing ratio; the amount of capital the new partners are to contribute; and how this capital is to be handled. All these points will be more fully discussed in this chapter.

One of the problems which must be settled when a partner is being admitted, either by a sole proprietor or by an already existing partnership, is that of the proper valuation of the assets of the business to which the new partner contemplates admission. A clear understanding on this point by the old and new members is very important. A balance sheet taken from the books of the old firm will show the book value of all assets and the net worth of the old firm. This value may be more or less

than the real value of the business. If the business is prospering and making a good profit, quite likely it will be valued at a great deal more than the net worth; and, similarly, should the business be in poor shape, the net worth ascribed to it by the balance sheet may greatly overestimate the true value of the business. This usually requires a revaluation of all the assets and the measurement of good-will, if such an asset is to be added. All these points should be carefully studied and included in the agreement admitting the new partner.

Probably the best way to bring out these various problems is by a series of cases involving different important points to be observed when a new partner is admitted.

Case No. 1

Suppose A and B, who have conducted the A and B partnership for three years, wish to expand their business, and invite C to join them as a partner.

The following balance sheet taken from the books of the A and B partnership as of December 31 is presented to C as a basis for consideration.

A AND B

Balance Sheet as of December 31

Cash	$ 3,200.00	Total Sundry Liabilities	
Accounts Receivable	14,600.00	(details omitted)	$29,200.00
Notes Receivable	3,000.00	A Capital	15,000.00
Inventory	16,000.00	B Capital	15,000.00
Land and Buildings	20,000.00		
Office Equipment	2,400.00		
	$59,200.00		$59,200.00

A. Purchase of an Interest, Cash to Remain in the Business.— C is satisfied that the assets are correctly valued and wishes to purchase a one-third interest in the business by making a cash investment of $15,000.00, which is to be used by the business in its expansion.

The only journal entry required at this time (after the new organization is completed) will be:

Cash	$15,000.00	
C Capital		$15,000.00

When this entry is posted, the three capital accounts will be equal, each $15,000.00, and C will have a one-third interest in the business.

B. Purchase of an Interest, Cash to Partner or Partners as Personal Consideration. — Assume, in this instance, that A and B agree to admit C as an equal partner and sell C a one-third share in the business for $10,000.00, but the purchase price they receive is to be divided equally between them personally and not to go into the partnership at all.

The net worth of the business according to the balance sheet in Case No. 1 is $30,000.00; therefore, if C is to own a one third interest in the business, his account will have to be credited with one third of the net worth or $10,000.00, while A's and B's capital accounts will have to be debited each with $5000.00.

The journal will be as follows:

GENERAL JOURNAL

A Capital	$ 5,000.00	
B Capital	5,000.00	
C Capital		$10,000.00
To record the sale of a one-third interest in the A and B partnership, as per new partnership agreement.		

When this journal entry has been posted, the partners' capital accounts will appear as follows:

A — CAPITAL

Jan. 2	To adjust as per agreement	$5,000.00	Dec. 31	Balance	$15,000.00

B — CAPITAL

Jan. 2	To adjust as per agreement	$5,000.00	Dec. 31	Balance	$15,000.00

C — CAPITAL

			Jan. 2	$\frac{1}{3}$ interest in A–B–C partnership	$10,000.00

Case No. 2

We shall again use the same balance sheet as in Case No. 1; but assume the business has been losing money, and, although solvent, the values ascribed to the assets are too high, according to C's accountants who have made a careful audit and examination.

C's accountants present the following balance sheet as more accurately valuing the assets owned by A and B.

A AND B

Balance Sheet as of December 31

Assets		*Liabilities*	
Cash	$ 3,200.00	As before, details omitted	$29,200.00
Accounts Receivable (less allowance for bad debts)	10,000.00		
Notes Receivable	3,000.00		
Inventory Cost less unsalable product rejected	12,000.00	*Net Worth*	
Land & Buildings	15,000.00	A Capital	8,000.00
Office Equipment	2,000.00	B Capital	8,000.00
	$45,200.00		$45,200.00

On this valuation C offers A and B $8000.00 for a one-third share in the new business, providing the $8000.00 contributed stays in the business and that the assets be revalued as in the preceding balance sheet.

Assuming A and B agree, the following journal entries will be required:

GENERAL JOURNAL

—1—

A Capital	$7000.00	
B Capital	7000.00	
Reserve for Doubtful Accounts .		$4600.00
Inventory		4000.00
Land & Buildings		5000.00
Office Equipment		400.00
To revalue assets as per new partnership agreement.		

—2—

Cash	$8000.00	
C Capital		$8000.00
To record receipt of cash from C for a one-third share in the new partnership as per agreement.		

When the journal entries above have been posted, the three partners' capital accounts will appear as follows:

A — Capital

Jan. 2	To charge for revaluation as per agreement	$7,000.00	Dec. 31	Balance	$15,000.00

B — Capital

Jan. 2	To charge for revaluation as per agreement	$7,000.00	Dec. 31	Balance	$15,000.00

C — Capital

			Jan. 2	For a $\frac{1}{3}$ interest in the "A–B–C" partnership	$8,000.00

Case No. 3

The same balance sheet as used in Case No. 1 is again employed. This time let us assume that A and B, in offering C a one-third share in the partnership, believe that, while the assets on the balance sheet reflect the correct valuation, another asset in the form of good-will should be added before the one-third share is figured. A and B believe that, during the three years the business has been in operation, they have built a very fine reputation; and, because of their increasing sales together with a profit of five per cent above the average in their line of business, a value should be placed on the good-will.

GOOD-WILL IN PARTNERSHIP

When a partner is being admitted it will be often necessary to calculate a value for good-will, just as it is also sometimes required when a member is withdrawing from a firm, or if a part-

ner dies. A great deal has been written about good-will and a further comment will appear in this text in a subsequent chapter; but, except as we are immediately concerned, no lengthy, theoretical discussion shall be entered into at this time. Let us assume, for brevity's sake, that the old partners have proposed an allowance of $4425.00 for good-will, and C, the new partner, accepts this figure. Two possible methods of treatment will give two rather different results.

A. Good-will Treated as an Asset to be Added before New Partner is Admitted. — In this case A, B, and C mutually agree that the value of good-will, $4425.00, shall be first written onto the books and divided equally between A and B, and that C shall pay into the new business cash equal to A's and B's capital investments. The following Journal entries will carry out this arrangement.

General Journal

—1—		
Good-will	$ 4,425.00	
A Capital		$ 2,212.50
B Capital		2,212.50
To record the asset Good-will and its distribution equally between A and B.		
—2—		
Cash	17,212.50	
C Capital		17,212.50
To record the receipt of cash from C as his payment for a $\frac{1}{3}$ interest in the new partnership.		

A balance sheet taken from the ledger of the A–B–C partnership after the two Journal entries above have been posted would look as follows:

A–B–C

Balance Sheet as of January 2

Cash	$20,412.50	Total sundry liabilities (details omitted)	$29,200.00
Accounts Receivable	14,600.00		
Notes Receivable	3,000.00		
Inventory	16,000.00		
Land and Buildings	20,000.00	A Capital	17,212.50
Office Equipment	2,400.00	B Capital	17,212.50
Good-will	4,425.00	C Capital	17,212.50
	$80,837.50		$80,837.50

B. Good-will Divided Between Partners as a Personal Consideration. — In this treatment A and B feel that they have been instrumental in building up the good-will and that this amount should be paid to them as a personal consideration, aside from the amount C must pay into the firm for his membership. Assume that C agrees to this condition (which will cost him more), then on the books of the partnership the only entry required would be:

GENERAL JOURNAL

Cash	$15,000.00	
C Capital		$15,000.00
To record the receipt of $15,000.00 from C as his contribution to the business for a $\frac{1}{3}$ interest.		

When this journal entry has been posted, the three capital accounts will be equal, each having a credit of $15,000.00.

Under these circumstances C would pay the agreed amount $4425.00 to A and B as a personal consideration, and of course no records would be required on the books of the partnership.

It will be noted that the amount paid by C for good-will, as part of the cost of his share in the new partnership, does not appear on the new balance sheet which is illustrated below.

A–B–C

Balance Sheet as of January 2, 19—

Cash	$18,200.00	Total Sundry Liabilities (details omitted)	$29,200.00
Accounts Receivable	14,600.00		
Notes Receivable	3,000.00		
Inventory	16,000.00	A Capital	15,000.00
Land and Buildings	20,000.00	B Capital	15,000.00
Office Equipment	2,400.00	C Capital	15,000.00
	$74,200.00		$74,200.00

DISSOLUTION AND TERMINATION

The Uniform Partnership Act, Section 29, defines dissolution as ". . . the change in the relation of the partners caused by any partner ceasing to be associated in the carrying on, as distinguished from the winding up of, the business." And by the following article, Section 30, Uniform Partnership Act, we note

that termination goes further than dissolution and includes the winding up and settlement of the partnership affairs.

There are many ways in which a partnership may be dissolved. However, we shall concern ourselves with only a few of the more important cases.

1. EXPIRATION OF AGREED TERM

If the articles of co-partnership are properly drawn, a clause on the subject of dissolution should be included.

If a partnership is formed for a definite period, then at the close of that period the firm is automatically dissolved. However, the partners may agree to continue. Under these circumstances no accounting is required.

Should the partners decide not to continue, the problem of winding up the affairs of the partnership must be tackled.

When such a decision is reached, usually one partner will be appointed liquidating partner. He will publish notice of the liquidation in the leading newspapers and give notice to creditors. He will carry on the business only as far as it is necessary to liquidate the affairs of the partnership. This will include only the purchases necessary to complete contracts, and to complete partly finished goods. His most important duties will be the actual liquidation of the business.

The usual procedure is for the liquidating partner to sell the assets and pay the firm's liabilities. Any proceeds remaining will be used to pay the partners' claims.

The liquidator must be careful in liquidating, particularly if there is any likelihood that there will not be sufficient funds from the sale of the assets to pay all the liabilities in full. He must be guided by the following rules as outlined in the Uniform Partnership Act, Section 40; New York Partnership Law, Section 71, which is quoted in part:

RULES AS TO SETTLING ACCOUNTS AFTER DISSOLUTION

" In settling accounts between the partners after dissolution, the following rules shall be observed, subject to any agreement to the contrary:

(*a*) The assets of the partnership are:

I. The partnership property.

II. The contributions of the partners necessary for the payment

of all liabilities specified in paragraph (*b*) of this subdivision.

(*b*) The liabilities of the partnership shall rank in order of payment as follows:

I. Those owing to creditors other than partners.
II. Those owing to partners other than for capital and profits.
III. Those owing to partners in respect of capital.
IV. Those owing to partners in respect of profit. . . ."

A study of the rules above makes it clear that " liabilities " must be paid first and in full before anything may be paid to the partners. (*b*) II above means that partners' loans and interest should next be paid and in full to the partners having such loan accounts before the partners receive their capital investments as indicated in (*b*) III.

When a partnership is liquidated, there is usually some good reason for liquidating, and step (*b*) IV above is not ordinarily reached; however, should there be a profit on the liquidation, then, of course, it will be paid to the partners on the profit and loss ratio, like any other profit.

The more usual cases in partnership dissolutions will not yield sufficient funds to pay all the partnership claims. If a partnership contemplates liquidation and can see that the assets will not yield enough to pay the liabilities in full, as in (*b*) I above, and if the partners have no personal estates with which to pay any deficiency, then it will pay them to have their attorney file a voluntary petition in bankruptcy. In this case a receiver will be appointed by the court to liquidate the business and the partners in due course will all receive discharges in bankruptcy. If, on the other hand, any partner has a personal estate which could pay the creditors any deficiency resulting from the sale of the partnership assets, then it will probably pay that partner to liquidate the business himself, and save the expenses of a receivership; for, if a receiver is appointed, he will assess any partner who has funds to pay a deficiency to the creditors.

If one of the partners liquidates a business, and, after paying the outside creditors in full, has not sufficient funds to pay the partners in full, then there must have been a loss on liquidation. This loss on liquidation should be charged to the partners' capital accounts just like any other loss, as per the partnership agreement; or, in absence of an agreement, the loss must be shared equally. After this loss has been charged to the partners, the

total balances in the partners' accounts will equal the cash available for distribution; and the final step of liquidation will divide these funds among the partners, in accordance with their adjusted balances.

Case No. 1

LIQUIDATION OF PARTNERSHIP — VOLUNTARY AGREEMENT

A and B have been partners. The term of their partnership has expired and they mutually agree to dissolve. A is to continue the business only as long as is necessary to fill outstanding orders and immediately is to proceed to sell the assets and pay off the firm's liabilities, and to wind up the partnership affairs. The following is the balance sheet of the A–B partnership as of February 15, 19—, the date of termination.

A–B

Balance Sheeet as of February 15, 19—

Assets		*Liabilities*	
Cash	$ 2,462.00	Notes Payable	$ 5,000.00
Notes Receivable	3,000.00	Accounts Payable	7,887.00
Accounts Receivable	8,245.00	*Total Liabilities*	12,887.00
Merchandise Inventory	3,140.00		
Office Equipment	1,000.00	*Net Worth*	
Delivery Truck	1,800.00	A Capital	4,280.00
Sundry Assets	240.00	B Capital	2,720.00
	$19,887.00		$19,887.00

At March 15th A has completed the liquidation of the business. The assets, exclusive of cash, sold for $13,938.00, while $343.00 was expended in necessary expenses of liquidation. The firm's liabilities, together with the expenses of liquidation, have been paid in full, and A has left $3170.00. The net loss on liquidation is $3830.00 and this will be distributed on the profit and loss sharing ratio, which in this case, let us assume, is 60% to A and 40% to B.

The following would be the journal entries to give effect to all the steps above in the complete liquidation of the business:

General Journal

–1–

Cash	$13,938.00	
Loss on Liquidation	3,487.00	
Notes Receivable		$ 3,000.00
Accounts Receivable		8,245.00
Merchandise Inventory		3,140.00
Office Equipment		1,000.00
Delivery Truck		1,800.00
Sundry Assets		240.00
To record the sale of assets and the resulting loss on liquidation.		

–2–

Notes Payable	5,000.00	
Accounts Payable	7,887.00	
Cash		12,887.00
To record the payment in full of all liabilities.		

–3–

Loss on Liquidation	343.00	
Cash		343.00
To record the expenses of liquidation paid in full.		

After these entries have been posted a trial balance would reveal the following condition:

Cash	$ 3,170.00	
Loss on Liquidation	3,830.00	
A Capital Account		$ 4,280.00
B Capital Account		2,720.00
	$ 7,000.00	$ 7,000.00

The next journal entry will distribute the loss on liquidation according to the profit and loss sharing ratio.

–4–

A Capital	$ 2,298.00	
B Capital	1,532.00	
Loss on Liquidation		$ 3,830.00
To distribute above loss 60% to A and 40% to B.		

The following journal entry will record the payment of the partners' balances:

–5–

A Capital	1,982.00	
B Capital	1,188.00	
Cash		3,170.00
To record the payment of the remaining cash to the partners, closing the cash account and capital accounts of the partners.		

After these entries have been posted, all accounts of the partnership will have been closed and the business completely liquidated.

DEATH OF A PARTNER

The death of any partner automatically dissolves the partnership. The surviving partners may decide to liquidate the affairs of the partnership or they may decide to continue the old organization. If dissolution is decided upon, the same procedure as illustrated above will be carried out. Very often the articles of co-partnership will be specific on this question and outline the procedure in case of dissolution or continuation of the business. Usually some agreement will be made to permit the surviving partners the right to continue the business, paying the deceased's share in the old partnership to his estate in several installments. This clause is inserted to prevent the possible destruction of a profitable enterprise, which might be destroyed or hurt if any one partner's entire share had to be paid at one time. Sometimes a provision is also included requiring a revaluation of assets, particularly good-will, so that the deceased's estate may receive its just part of the good-will which was built up during the deceased partner's lifetime.

Case No. 2

DEATH OF A PARTNER, SURVIVING PARTNERS CONTINUE

Suppose A, B, and C, who conduct the A–B–C wholesale hardware business, have agreed in the articles of co-partnership, " That in case of the death of any partner, the surviving partners may continue the business by paying to the estate of the deceased — in three equal installments, the first 30 days after death, the second 90 days after death and the balance six months after death — the book value of the deceased partner's share in

the business at the time of his death. This share is to be calculated as follows: the balance in his capital account plus any profits or minus any losses, which may be determined by the proper financial statements prepared as of the date of deceased partner's death. No revaluation of assets shall be made except to add good-will if such an asset exists, and to be calculated as follows. Considering ten per cent as a fair return on the capital invested, should any excess be earned, such excess shall be averaged over the three years last preceding the death of a partner. This average excess profit shall then be multiplied by five, to determine the value of good-will. This asset shall be added to the records and its value distributed to all partners according to their capital ratio, including the deceased partner's account." Profits and losses are also shared on the capital ratio.

A dies and a balance sheet taken as of the date of his death reveals the following financial condition:

A–B–C HARDWARE STORE

Balance Sheet as of February 17, 1940.

Sundry assets, details omitted	$70,000.00	Sundry liabilities, details omitted	$28,800 00
		A Capital	10,000 00
		B Capital	12,000 00
		C Capital	18,000.00
		Net profit for period Dec. 31, 1939 to Feb. 17, 1940, as per P. & L. Statement	1,200.00
	$70,000.00		$70,000.00

The profits for		Capital invested:
1937 were	$ 7,200.00	$ 35,000.00
1938 were	8,400.00	42,000.00
1939 were	8,700.00	40,000.00
	$24,300.00	$117,000.00
Average profit	$ 8,100.00	Average capital .. $ 39,000.00

The average profits of $8100.00 exceed ten per cent of capital investment ($3900.00) by $4200.00. This amount multiplied by five equals $21,000.00, the value which should be placed on the firm's good-will.

This amount should be placed on the firm's books by a Journal entry crediting each partner with his proper share as per the partnership agreement.

General Journal

—1—

Good-will	$21,000.00	
A Capital Account		$ 5,250.00
B Capital Account		6,300.00
C Capital Account		9,450.00
To set up the good-will computed at death of A, and distribute it to each of the partners in the capital ratio, in accordance with the partnership agreement.		

—2—

Profit and Loss	$ 1,200.00	
A Capital		$ 300.00
B Capital		360.00
C Capital		540.00
To distribute the profit from Dec. 1939 to Feb. 1940 to the partners in the capital ratio.		

After these entries have been posted, A's capital account will appear as follows:

A Capital

		Bal. Dec. 31, 1939	$10,000.00
		Add ¼ of Profit to Feb. 17, 1940	300.00
		Add ¼ of good-will	5,250.00

B and C agree to purchase A's share and continue the business by paying to A's estate $15,550.00 as above calculated; giving to A's estate three notes, the first $5183.33, due March 19, 1940, the second $5183.33, due May 18, 1940, and the third $5183.34, due August 17, 1940. The administrator of A's estate agrees and the affairs of the old partnership are closed. B and C form a new organization, setting up the liability due A's estate as *Notes Payable,* after which the following balance sheet is prepared.

B–C

Balance Sheet as of Feb. 18, 1938

Assets		*Liabilities*	
Sundry (detail omitted)	$70,000.00	Sundry (detail omitted)	$28,080.00
Good-will	21,000.00	Notes Payable to Estate of "A"	15,550.00
		Total Liabilities	$44,350.00
		Net Worth	
		B Capital	18,060 00
		C Capital	27,090.00
	$91,000.00		$91,000 00

The student will observe from the balance sheet above that the notes given to the executors of the estate of A have been shown as liabilities of the new partnership, and these will be paid off as per the agreement. This arrangement is entirely in conformity with partnership law just as long as the former creditor's rights are safeguarded. But any retiring partner (or deceased partner's estate), while not liable for future debts of the new partnership, is truly a guarantor of payment of the old debts.

Several other causes may result in the dissolution of a partnership, beside the few reviewed. The majority of these reasons are highly technical and involve an understanding of the law of partnership and affiliated subjects; for instance, such causes as the misconduct of a partner, the insanity of a partner, or bankruptcy of a partner or of the firm. In all these cases the partnership, if not automatically dissolved by law, is subject to dissolution by any member desiring dissolution. For further information the student should refer to any standard work on the law of partnership. The accounting technique involved would follow lines similar to those already outlined.

LIMITED PARTNERSHIP

Most states today have adopted the Uniform Limited Partnership Act, or have statutes of a similar nature. To establish a limited partnership all the requirements of the law must be complied with. The partnership agreement must be sworn to by the general and special or limited partners and must usually be filed

in the office of the County Clerk, where the partnership's principal office is to be located. The certificate must state among other things:

(*a*) Name and address of the partnership. (The name of the limited partners cannot be used in the firm name.)
(*b*) Names and addresses of all general and limited partners.
(*c*) The contributions of the limited partner.
(*d*) The nature and life of the partnership.

In every limited partnership there must be at least one general partner. The general partners control and manage the business. The limited partners to be limited must be silent. Accounting for the limited partnership is very much the same as that required for the regular form of partnership.

QUESTIONS ON THE CHAPTER

1. Does the death of a partner always result in a dissolution of the partnership?

2. Differentiate between dissolution and termination of a partnership.

3. May the executor or the administrator of a deceased partner's estate demand membership in the partnership, in order to see that the share of the deceased partner is fully protected?

4. Outline briefly the application of funds from the sale of assets of partnership as given in Sec. 40 of the U.P.A.

5. If a partner dies, (*a*) Why should the books be closed? (*b*) Why may it be necessary to revalue the assets?

6. If A is operating a business as a sole proprietor with assets in amount of $20,000 and liabilities of $14,000,

(*a*) How much should B contribute in cash if he is to join A as an equal partner?

(*b*) How much should B contribute in cash if he is to have a one third interest.

7. Presume the same case as in Question 6, but that A feels there should be $3000.00 for good-will written onto the books before B is admitted. How much should B invest if he is to be an equal partner, presuming he agrees to the good-will?

8. If partners agree to liquidate,

(*a*) What are the usual duties of the liquidating partner?

(*b*) What should the liquidating partner do if the assets are not sufficient to pay the liabilities in full?

9. When and how may good-will be placed on partnership books?

10. (*a*) Describe a limited partnership.

(*b*) How is it formed?

11. Why should a special or limited partner be a silent partner?

PROBLEM MATERIAL

Problem 1

The following balance sheet was taken from the books of the Barney and Cole Co. at December 31, 19—:

Barney and Cole Co.

Balance Sheet as of Dec. 31, 19—

Assets		*Liabilities*	
Cash	$ 3,200.00	Accounts Payable	$20,500.00
Accounts Rec'ble	17,500.00	Notes Payable	4,200.00
Notes Rec'ble	2,000.00	Mortgage Payable	18,000.00
Inventory	14,000.00	*Total Liabilities*	42,700.00
Land	6,000.00		
Buildings	30,000.00	*Net Worth*	
Machinery and Equipment	10,000.00	Barney Capital	25,000.00
		Cole Capital	15,000.00
	$82,700.00		$82,700.00

(*a*) Assume Douglas wishes to join the partnership as a one-third owner. How much cash must he pay if the cash is to go into the business?
(*b*) How much cash must he pay, assuming that the cash is to be paid to Barney and Cole as an outside consideration, and they agree to reduce their capital accounts proportionately?
(*c*) Write the journal entry or entries required to accomplish both (*a*) and (*b*) above.

Problem 2

Using the same balance sheet as in Problem 1:

Assume that Barney and Cole, who have been losing money, appeal to Douglas to join them as a partner.

An independent C. P. A. examines the books and records of the partnership to see that the assets are conservatively valued. His recommendations are as follows:

(1) $1500.00 of Accounts Receivable are worthless and should be charged off.
(2) Five per cent of the balance of Accounts Receivable should be set up as a Reserve for Doubtful Accounts.
(3) The Inventory should be revalued at $10,000.00.
(4) A Reserve for Depreciation of Buildings should be set up calculated at 20% of the Buildings' cost.
(5) A Reserve for Depreciation of Machinery and Equipment should be set up in amount of $2000.00. All other items are in order.

Mr. Douglas reports his accountant's findings and indicates that he will join, provided the partners re-value the assets as indicated in the accountant's report. He will invest a sum sufficient to make him a one-half owner.

Barney and Cole, who have been sharing all profits 5/8 and 3/8, agree.

Required:

(1) Journal entries to revalue assets in accordance with the accountant's report.

(2) Journal entry to record Douglas investment.

(3) A balance sheet of the new firm which is to be known as the B–C–D Company after Mr. Douglas has been admitted.

PROBLEM 3

Mr. Farlee and Mr. Rose have been partners for many years, sharing gains and losses equally. They both wish to retire, but because they cannot sell the business as a going concern they plan to liquidate it as rapidly as possible. A balance sheet taken from their records at July 15, 19—, reveals the following condition:

FARLEE-ROSE CO.

Balance Sheet as of July 15, 19—

Assets		*Liabilities*	
Cash	$ 4,200.00	Notes Payable	$ 3,000.00
Notes Rec'ble	3,600.00	Accounts Payable	26,000.00
Accts. Rec'ble	16,500.00	Mortgage Payable	25,000.00
Store Bldg. & Site	45,000.00		54,000.00
Store Equipment	8,000.00	*Net Worth*	
Office Equipment	2,700.00		
Inventory	38,000.00	Farlee Capital	40,000.00
Delivery Equipment	6,000.00	Rose Capital	30,000.00
	$124,000.00		$124,000.00

At September 1st the assets have been wholly liquidated. The assets exclusive of cash were sold for a total of $85,800.00. The necessary expenses of liquidation amounted to $800.00 and were paid in full as were all the firm's liabilities.

Required: All journal entries necessary to close the books of the partnership, including the sale of the assets, the payment of the liabilities and expenses of liquidation, the distribution of any gain or losses and final cash settlement.

PROBLEM 4

B. Gross and C. Howard are partners and conduct a wholesale hardware business under the firm name of the Gross Howard Co. The partnership agreement among other clauses provides for interest, drawings, and profits as follows:

1. No salary shall be allowed, but each partner may draw up to \$300.00 per month in anticipation of profits.
2. No capital investments or withdrawals shall be made except by mutual consent of the partners.
3. Interest shall be allowed on all capital invested at the rate of 6% per annum.
4. Any profit or loss remaining after providing for interest and partners' drawings is to be shared equally.

The following capital and drawing accounts appear on the books at December 31st. The company has realized an operating profit of \$14,800.00 and all accounts have been closed except those below.

B. Gross Capital

		Jan. 1	Balance	\$32,000.00

C. Howard Capital

		Jan.	Balance	\$36,000.00

B. Gross Drawings

Dec. 31 total	\$3,600.00		

C. Howard Drawings

Dec. 31 total	\$3,600.00		

Profit and Loss Summary

		Dec. 31	Balance	\$14,800.00

Required: Considering the articles of co-partnership above, complete the closing of the books. Give the journal entries and ledger accounts.

CHAPTER XVI

CORPORATIONS — ORGANIZATION

Corporations are usually divided into two large groups: Public or Governmental Corporations, and Private Corporations. Our discussion is concerned only with Private Corporations, excluding banks, insurance, and railroad corporations.

DEFINITION AND CHARACTERISTICS OF CORPORATIONS

In 1819 Chief Justice Marshall, in the now famous Dartmouth College case, defined a corporation. This definition has been quoted by almost every writer on corporations, and is repeated here because it does enumerate the characteristics of the corporation. "A corporation is an artificial being, invisible, intangible and existing only in contemplation of law. Being the mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence. These are such as are supposed best calculated to effect the object for which it was created. Among the most important are immortality, and, if the expression may be allowed, individuality; properties, by which a perpetual succession of many persons are considered as the same, and may act as a single individual. They enable a corporation to manage its own affairs, and to hold property, without perplexing intricacies, the hazardous and endless necessity, of perpetual conveyances for the purpose of transmitting it from hand to hand. It is chiefly for the purpose of clothing bodies of men, in succession with these qualities and capacities, that corporations were invented and are in use. By these means a perpetual succession of individuals are capable of acting for the promotion of the particular object, like one immortal being." (*Dartmouth College* vs. *Woodward* (U. S. 1819) 518.)

A corporation has the status of a separate legal entity, having an existence separate and apart from its members. In the eyes of the law it is an "artificial being," and in the statutes where the word "person" is used it usually refers to corporations as well as to "natural persons." It is created by law and exists only in contemplation of law. It may sue and be sued in

the corporation name. It is different from a partnership in that a partnership is not a legal entity, but a personal relationship growing out of a contract. In the corporation the State creates a separate legal entity. The acts of the partnership are the acts of the individual members. If a creditor wishes to sue a partnership, he sues the individual partners comprising the partnership. On the other hand, in the case of corporation, the corporation through its officers may act as an entity, and, as was said above, creditors may sue the corporation, in the corporate name.

ADVANTAGES OF THE CORPORATE FORM OF ORGANIZATION

1. Limited Liability of Stockholders. — When one purchases a share of stock in a newly organized corporation and pays to the corporation the full face, or par, value of the share, then legally he cannot be held for any further contribution to the corporation. If the corporation fails he may lose his entire investment, but he can lose no more (except in one or two States where double liability exists, as in California). This is a very attractive feature to the small investor, who may be willing to invest a small sum in a corporation in anticipation of large profits, but who cannot take any risks in excess of his investment.

2. Ownership Evidenced by Transferable Shares. — Another very attractive feature of the corporate form of organization is the fact that when one purchases a share of stock he receives a certificate as evidence of such ownership, which is transferable by assignment. This advantage makes it possible for the investor to sell and easily assign his stock to a new owner, who may have the stock registered in his name. This advantage leads to the third.

3. Possibility of Large Aggregate Capital. — Because of the fact that the ownership may be divided into transferable shares, the par value of which may be small, it is possible to sell a great deal of the stock to the small investor, who could not purchase a large interest in any business. The usual par value is one hundred dollars, although ten, twenty-five, and fifty dollar par values are quite popular; and also a more recent practice is the issuance of stock without par value. Another advantage which will " draw " capital is the fact that certain shares may

be "preferred." This feature will be discussed later in the chapter.

4. *A More Stable and Permanent Form of Organization.* — In the single proprietary form of organization or partnership, death automatically dissolves the partnership and necessitates a reorganization before the business may continue. It may even mean the termination of the enterprise altogether.

In the corporate form of organization the death of the principal stockholder need not mean reorganization, because of the fact that his holdings consist of transferable shares, which usually can be disposed of without a great deal of trouble. The death of the average stockholder has no bearing nor effect on the existence of the corporation. The life of a corporation may be said to be perpetual, because most States permit corporations to continue indefinitely until dissolved according to law.

5. *Legal Entity an Advantage.* — The fact that a corporation is a distinct legal entity is an advantage, because it permits the corporation to take title to real property in the corporation name; and, similarly, to sue or be sued in the corporation name, or to negotiate contracts in the name of the corporation.

DISADVANTAGES OF THE CORPORATE FORM OF ORGANIZATION

1. *Corporation Taxes and Numerous Reports.* — The corporation, being "a creature of the State," is subject to supervision and control by the State from which the charter is granted. At present corporations are taxed by both the State and the Federal governments. As a basis for taxation and for other reasons both the State and the Federal governments require that a great many reports be furnished. These reports should not be so difficult to prepare if the corporation keeps good accounting and statistical records. Many corporations feel that the preparation and filing of long detailed reports with various governmental boards not only puts a burden on them, but some of the information contained in these reports, being more or less public property, might be secured by competitors and used to the detriment of the reporting corporation.

2. *Limited Liability of Stockholders.* — It will be noted that this reason was given as an advantage to the stockholders, and so it is; but to the corporation it may work as a disadvantage

when it contemplates borrowing funds. A corporation can pledge only the assets of the corporation, and very frequently banks will not loan unless one or two of the officers of the corporation will endorse the corporation's note. This, of course, is quite a disadvantage, particularly to the interested officers.

3. Lack of Personal Interest in Management. — Another point often mentioned by writers on corporations, as a disadvantage, is the fact that the managers of the corporation lack the real personal interest which is present in the sole proprietary and the partnership forms of organization. This can very readily be overcome by giving shares to all executives and junior executives, thus making them stockholders in the corporation.

4. Limitation of Activity. — Another disadvantage, quite frequently cited by writers on corporations, is the fact that a corporation is limited in its activities to the powers granted in its charter. This may be overcome, however, by drawing the clause describing the scope of the corporation wide enough to allow for possible expansion.

Without going any further into advantages or disadvantages of the corporate form of organization, let us now see the procedure necessary to the formation of a corporation.

FORMATION OF A CORPORATION

PROCEDURE IN GETTING A CHARTER

Corporations are spoken of as "creatures of the law" because they come into being by means of a "charter" or grant from one of the States of the Union. Each State has its own corporation law. This law is not uniform in all States, nor has any uniform law, such as the Uniform Partnership Act, been applied to the law of corporations.

At one time the legislatures granted all charters, but today, in the majority of States, this power has been delegated to the Secretary of State or to an officer of similar authority. In most States at least three incorporators are necessary. These individuals must take upon themselves the liability of forming the corporation. A considerable amount of business may have to be transacted before the charter is granted and the corporation started. In the meantime, the incorporators are jointly and severally liable for any debts they contract in the undertaking.

The legal procedure is not easy, and competent legal advice should be summoned by those interested in launching this type of business enterprise.

The usual procedure is the filing of an application for a charter with the Secretary of State of the state in which incorporation is desired. In New York a certificate of incorporation must be filed with the Secretary of State at Albany, New York, and a copy of it must be filed with the county clerk, in the county in which the corporation will do business.

APPLICATION FOR CHARTER

The legal right to operate a corporation is obtained from the State government which issues a charter. As there are so many states, so also are there so many different state corporation acts which prescribe the proper method of obtaining a charter in their particular state. Each state provides an application form which should be obtained from the state in which the corporation intends to operate. The application form, of course, varies just as the state laws are different, but in general the following points are included in all applications for charter:

1. The name.
2. The purpose of the corporation.
3. The amount of stock, common (with par value and amount without value), and preferred, including the dividends to be paid on the latter.
4. The city and the county in which the principal office is to be located.
5. The intended duration of the corporation.
6. The names and addresses of the directors (who must be at least three in number), and the names and addresses of the subscribers to the certificate and the number of shares the latter take.
7. A statement that:
    (*a*) At least two-thirds of the subscribers to the certificate are adult United States citizens and,
    (*b*) That at least one is a New York resident, and that,
    (*c*) At least one director is both a United States citizen and a New York resident. (From the New York State Corporation Law).

This certificate must be signed and separately acknowledged by each incorporator, and forwarded to the Secretary of State or other officer in charge of issuing charters.

It might be well to discuss some of the points required in the preceding form.

A corporation may select and use any name which is not already in use by another organization.

The purpose of the proposed corporation is important, because, when the charter is granted, this paragraph will set the limits of the corporation's actions. It is very wise, therefore, to ask for wider powers in the charter than immediate use may require; otherwise it may be necessary to have the charter amended if the corporation, subsequently, wishes to expand the scope of its operations.

The next point calls for a decision on the amount of capital stock to issue. This is a question more of corporation finance than of accounting and will not be gone into at this time. The balance of the information on the form is routine and unimportant from an accounting point of view.

After the corporation has received its charter, it should call a meeting of the stockholders to elect a Board of Directors, adopt a set of by-laws, and transact other business of organization. When this preliminary work of organization is completed, the corporation should be ready to commence business.

CAPITAL STOCK AND TYPES IN COMMON USE

The amount of capital stock which a corporation may issue is fixed by the charter. The capital which it may raise by the sale of its stock is therefore limited. The amount, however, may subsequently be increased or decreased by amending the charter in accordance with the law of the State in which the charter is granted.

The charter will also designate the type of stock and amounts of each different kind of stock which may be issued. The kinds of stock in common use today may be classed as:

(1) Common stock,
(2) Preferred stock,
  (*a*) Participating or non-participating,
  (*b*) Cumulative or non-cumulative.

COMMON STOCK DEFINED

Common stock may be defined as that stock which has no preference in the matter of profits or assets over any other stock

issued by the company. Where only one kind of stock is issued, common stock is used and all stockholders are on a common footing. The common shareholders usually elect a Board of Directors and through this group maintain control of the company.

PREFERRED CAPITAL STOCK

Capital stock which carries with it some preference over the common stock is known as preferred capital stock. The usual preferences are as to division of profits and division of assets in case of dissolution.

The preference in the division of profits usually takes the form of a fixed rate on the face or par value of the shares, or so many dollars or cents per share in case of shares without par value, which must be paid from earnings of the corporation before any dividends may be distributed to the holders of the common stock.

To illustrate, suppose the Cambria Manufacturing Company has issued 1000 shares of common stock with a par value of $100. per share, and 1000 shares of 8% preferred stock whose par value is also $100. Suppose, at the end of the year, the company reports a profit of $17,500.

The holders of the preferred shares will first receive 8% of the par value of their holdings. This will require $8000. The Board of Directors will then vote as to what disposition they will make of the other $9500. It is not a good policy to pay out all earnings in the form of dividends, so that the Board of Directors may pay 6% to the holders of the common stock and set the remainder aside in the surplus account.

The preferred stock may be issued as either cumulative or non-cumulative, as regards the eight per cent dividends. If it is cumulative and the earnings of any one year are not sufficient to pay the eight per cent, then any deficiency accumulates to the credit of the preferred stockholders, and will be paid to them before any dividends may be given to the holders of the common stock.

For illustration, suppose the Cambria Manufacturing Company in 1938 paid the preferred stockholders only 5%, and paid nothing in 1939, and in the year ended December 31, 1940, made $17,500, as in the previous case.

Under these circumstances the holders of the 8% preferred stock would have due them 3% from 1938, 8% from 1939, and 8% for 1940, or 19% in all. This would require a payment of $19,000. to liquidate. The usual procedure is to pay the highest even per cent or even half per cent and allow the balance to accumulate. The Board of Directors, therefore, might pay to the holders of preferred stock $17,000, which would be 17%, leaving 2% to be paid from subsequent earnings.

The preferred stock, if non-cumulative under the same set of facts as just given, would have received 5% in 1938, nothing in 1939, and only 8% in 1940.

A very interesting fact in favor of preferred stockholders is that preferred shares are held to be cumulative unless otherwise stated.

Preferred stock may also be made participating or non-participating. When a participating clause is granted in favor of the preferred stockholders, they participate in an agreed manner with the holders of the common stock after each class of stock has received a stipulated rate. For instance, suppose the A. B. Drake Company, Inc., has issued 1000 shares of 5% preferred stock, par $100. which is participating equally with the holders of common stock (1000 shares par $100.) in all earnings remaining after the preferred stockholders shall have received five per cent and the common stockholders six per cent.

Let us suppose that the earnings for 19— are $15,500.

The holders of the preferred stock and the common stockholders will received $5000 and $6000 respectively. This will leave $4500 to be divided equally between the holders of the preferred and the common. The largest even per cent which can be given is an additional two per cent to each. This will leave $500 for surplus. The Board of Directors may desire to allow a larger sum to remain in surplus and can vote to withhold any part of the earnings above the dividends which must be paid to the preferred stockholders.

In the last case, if the preferred stock was non-participating, the holders would have received only five per cent and the common stock might have been voted a much larger dividend.

Without going any further into a study of the various kinds of stock which a corporation may issue, we shall now study the entries required when a corporation is started.

OPENING ENTRIES FOR A CORPORATION

A corporation may sell and issue its capital stock just as soon as it receives its charter. In studying the following entries, the student is cautioned to note carefully the accounts used. The names of accounts dealing with the subscription, sale, and issue of capital stock, must be selected very carefully so that the titles used will accurately describe what the accounts are supposed to represent.

In presenting the opening entries we shall again use the case method and illustrate the more common situations which are met when the corporation is first organized.

Case No. 1

Suppose the Thornton Shoe Company, Inc., is organized to manufacture and sell shoes, and that its charter permits it to issue $500,000. worth of common capital stock with a par value of $100. per share.

A, B, and C, the incorporators, have subscribed for and paid in cash the following number of shares: A — 200 shares, $20,000.; B — 100 shares, $10,000.; and C — 80 shares, $8000. The remainder of the stock is to be offered to the public later.

The following entries will now be made and discussed:

GENERAL JOURNAL

—1—

Unissued Capital Stock	$500,000.00	
Capital Stock		$500,000.00
To record the authorized capital stock of the Thornton Shoe Company, Inc., 5000 shares par value $100.		

This entry sets the authorized issue of capital stock on the books. At this moment of time, no stock has been issued; therefore, the *Unissued Capital Stock* account offsets the *Capital Stock* account. We shall now see how the sale of part of the capital stock to the original incorporators affects these accounts.

—2—

Cash	$ 38,000.00	
Unissued Capital Stock		$ 38,000.00
To record the receipt of cash from the three original incorporators and the issuance of the certificates as follows:		

A — 200 shares at par	$20,000.00
B — 100 shares at par	10,000.00
C — 80 shares at par	8,000.00
Total 380 shares	$38,000.00

This entry cuts down the *Unissued Capital Stock* account by $38,000.00. The *Unissued Capital Stock* account, although resembling an asset in several ways, is not to be treated as an asset, but rather as a deduction from the *Capital Stock* account on the liability side of the balance sheet. This would be shown on the balance sheet of the Thornton Shoe Company, Inc., as follows:

THE THORNTON SHOE COMPANY, INC.

Balance Sheet as of March 1, 19—

Assets		*Liabilities*	
Cash	$38,000.00		None
		Net Worth	
		Capital Stock:	
		Authorized	$500,000.00
		Less Unissued Capital Stock	462,000.00
		Issued and Outstanding	38,000.00
	$38,000.00		$ 38,000.00

Case No. 2

Let us suppose that the Thornton Shoe Company, Inc., after offering its stock for sale to the public, has received at April 1 subscriptions to 2000 shares of the stock on the following terms: 10% cash with subscription contract and the balance to be paid in three equal installments, payable one month, two months, and three months, respectively. The stock is to be issued only after the last payment is made. The following journal entries will be made to handle this situation completely:

General Journal

—1—		
Subscription Contracts Receivable	$200,000.00	
Subscribed Capital Stock		$200,000.00
To record the receipt of Capital Stock Subscriptions from sundry subscribers.		
—2—		
Cash	20,000.00	
Subscription Contracts Rec'ble .		20,000.00
To record the Cash received with the subscription contracts 10% of the amount subscribed. The balance is to be paid, $60,000.00 May 1; $60,000.00 June 1; and $60,000.00 July 1.		

As these installments become due, a call will be sent to the subscribers for payment, and when the cash is received the stock will be issued. The following journal entries will illustrate the complete situation:

May 1		
Cash	$ 60,000.00	
Subscription Contracts Rec'ble .		$ 60,000.00
To record the receipt of installment No. 1 due today entire amount received.		
June 1		
Cash	60,000.00	
Subscription Contracts Rec'ble .		60,000.00
To record the receipt of installment No. 2 due today entire amount received.		
July 1		
Cash	60,000.00	
Subscription Contracts Rec'ble .		60,000.00
To record the final payment on subscriptions due today all payments received.		
July 1		
Subscribed Capital Stock	200,000.00	
Unissued Capital Stock		200,000.00
To record the issuance of 2000 shares of Capital Stock fully paid as per subscription contracts.		

Next will be presented two balance sheets of the Thornton Shoe Company, Inc. The first is as of June 1, and will show the status of the several accounts required at that date. The second balance sheet will show the financial condition of the Thornton Shoe Company, Inc., as of July 1, after the stock has been issued:

THE THORNTON SHOE COMPANY, INC.

Balance Sheet as of June 1

Assets		*Liabilities*		
Cash	$178,000.00	Subscribed Capital Stock		$200,000.00
Subscription Contracts Receivable	60,000.00	*Net Worth*		
		Capital Stock Authorized	$500,000.00	
		Less Unissued Cap. Stock	462,000.00	
		Issued and Outstanding		38,000.00
	$238,000.00			$238,000.00

In the balance sheet of June 1, above, it will be noted that the *Subscription Contracts Receivable* account has a balance of $60,000.00. This is exactly the amount due to the corporation from the subscribers. At the same time the company has a liability to the subscribers for the *Subscribed Capital Stock*. This is $200,000.00, the full amount of subscriptions. This liability is not reduced when the installments are received, as is the asset — *Subscription Contracts Receivable*, but is written off the books only after the actual shares are issued to the subscribers when their contracts are fully paid.

In the following balance sheet it will be noted that both the asset account *Subscription Contracts Receivable* and the liability account *Subscribed Capital Stock* have disappeared from the balance sheet. It will also be noted that at this date the amount of *Capital Stock*, issued and outstanding, is now $238,000.00. This amount is made up of the original issue of $38,000.00 to A, B, and C, and $200,000.00 to sundry subscribers, whose subscription contracts have just been fully paid by the receipt of the final installment of $60,000.00.

The next balance sheet illustrates the financial condition of

the Thornton Shoe Company, Inc., after the last payment is received and the stock issued:

THE THORNTON SHOE COMPANY, INC.

Balance Sheet as of July 1

Assets		*Liabilities*	
Cash	$238,000.00	Liabilities	None
		Net Worth	
		Capital Stock Authorized $500,000.00	
		Less Unissued Cap. Stock $262,000.00	
		Issued and Outstanding	238,000.00
	$238,000.00		$238,000.00

SECOND METHOD OF HANDLING SUBSCRIPTIONS TO CAPITAL STOCK

In the method above it will be noted that the capital stock subscribed to was paid in a series of installments, and was not issued to the subscribers until after the last payment was made by the subscriber, or until his contract was fully paid. This procedure is quite widely followed in practice, because it is much more convenient to the management to have on hand unissued stock of a subscriber who has failed to meet his payments, and which under the law may be forfeited to the corporation to be sold as described later, rather than have issued the stock and then to have to get it back again from the defaulting subscriber.

Some accountants, however, motivated by a legal fact that, once a subscription contract has been signed by the subscriber and accepted by the corporation, contend that the subscriber is the legal owner of the stock and should therefore get possession of the certificate; the subscription contract being his written promise to pay according to its terms. These accountants advocate the following entry when the subscription contract is signed by the subscriber and accepted by the corporation:

—1—

Subscription Contracts Receivable	$200,000.00	
Unissued Capital Stock		$200,000.00
To record receipt of subscriptions		

to 2000 shares of common Capital Stock of the Thornton Shoe Company, and the issuance of the shares to the subscriber.

Then the same three entries showing the payment of the subscription installments May 1, June 1, and July 1 would be recorded as in the first method.

METHOD SHOWING CALLS

It was stated in the first method that calls or notices of installments due are sent to the subscribers. These calls are mailed out usually from ten days to two weeks before the payment is due. Some accountants at this time write a general journal entry converting each installment into a separate "call" account as follows:

May 15		
Call No. 1 — (due June 1)............	$60,000.00	
Subscription Contracts Receivable ...		$60,000.00
To record issuance of Call No. 1 for payment of installment due June 1.		

Then, as cash is received from the subscribers, it is credited to the *Call* account rather than directly to the *Subscription Contracts* account. The advantage claimed for this procedure is that defaulting subscriptions are more easily recorded. If *Call* accounts are used, the other entries will be made as before, and *Call* accounts may be used in either method previously described.

FORFEITED STOCK

When stock is sold on installments, it often happens that one or more subscribers will fail to complete their payments to the corporation. The corporation laws of most States, under such circumstances, grant the corporation the right to forfeit the stock. That right, however, is entirely statutory, and the provisions of the Statute must be observed. While most States permit corporations to forfeit shares not fully paid as per the subscription contract, they usually provide that the corporation sell the stock at public auction and credit the proceeds to the unpaid subscription contract. Any balance left after the debt is paid must be returned to the defaulting subscriber, less

any expenses of the sale. In each case before forfeiting stock for unpaid subscriptions, the Statutes of the State in which the corporation is chartered should be consulted for the proper procedure.

In the State of New Jersey, from the General Corporation Act Section 23 (1936), we find this regarding "*Non Payment of Assessments; Sale of Shares*":

"If the owner of any shares shall neglect to pay any sum assessed thereon for thirty days after the time appointed for payment, the treasurer, when ordered by the Board of Directors, shall sell at public auction, such number of shares of the delinquent owner as will pay all assessments then due from him, with interest, and all incidental charges, and shall transfer the shares sold to the purchaser, who shall be entitled to a certificate therefor."

ACCOUNTING FOR FORFEITED SUBSCRIPTIONS

The accounting entries for forfeited stock must obviously depend upon the manner in which the subscription entries were handled.

Suppose that Mr. Henry Jones, who subscribed for ten shares of stock, has failed to pay the June and July installments. Let us suppose for simplicity's sake that he is the only subscriber who has failed to pay his contract in full. Then his account and the *Subscriptions Contracts Receivable* account would each show a debit balance of $600.00 as follows:

SUBSCRIPTIONS CONTRACTS RECEIVABLE

April 1	Total subscriptions	$200,000.00	April 1	Down Payment	$20,000.00
			May 1	Installment 1	60,000.00
			June 1	Installment 2	59,700.00
			July 1	Installment 3	59,700.00

HENRY JONES

April 1	Ten shares	$1,000.00	April 1	Down payment	$100.00
			May 1	Installment 1	300.00

Thirty days have elapsed since the last call was due, and the Board of Directors, by proper resolution, have declared the ten shares of stock subscribed to by Mr. Henry Jones forfeited and

have ordered the treasurer of the company to proceed with the sale of the stock in accordance with the law.

–August 1–		
Forfeited Stock	$1000.00	
Forfeited Stock Surplus		$1000.00
To record forfeiture and cancellation of Certificate No. .... for ten shares subscribed to by Mr. Henry Jones and declared forfeited this day by resolution of the Board of Directors.		
–September 1–		
Cash	800.00	
Forfeited Stock Surplus	200.00	
Forfeited Stock		1000.00
To record sale of ten shares of capital stock to Mr: J. MacGregor. Shares forfeited August first. Proceeds of sale $800.00.		
Subscribed Capital Stock	1000.00	
Unissued Capital Stock		1000.00
To record issuance of certificate No. .... to Mr. J. MacGregor, in place of certificate No. .... declared forfeited and cancelled.		
Forfeited Stock Surplus	40.00	
Cash		40.00
To charge the forfeited stock surplus with cost of advertising and auctioneer's fees.		
Forfeited Stock Surplus	600.00	
Subscriptions Contracts Receivable (Jones)		600.00
To apply part of proceeds of auction to cancel the subscription contract of Mr. Jones now fully paid.		
Forfeited Stock Surplus	$ 160.00	
Cash		$ 160.00
To record the payment of the net surplus due Mr. Jones.		

After these journal entries have been posted, the *Subscription Contracts Receivable* account and the *Subscription* account of Henry Jones will be closed, paid in full. All the stock fully paid will have been issued. The expenses of the sale were paid from the proceeds, leaving $160.00 which was mailed to the defaulting subscriber together with a statement of his account. This completes the case for forfeiture.

NO PAR VALUE STOCK

Before 1912, when New York State enacted a law allowing the issuance of capital stock without par value, corporations had to fix some par or face value for their shares. The most usual amount was $100.00. The amount would be very prettily engraved across the face of the certificate and to the uninitiated it would indicate that the value of the stock must be one hundred dollars or very close to it. The book value of the shares might be closer to ten dollars than to the one hundred dollar par value, but psychologically the engraved par value attached to the shares a meaning which had no bearing on the true value of the stock.

The practice before 1912 of insisting on corporations fixing a par value for its shares and placing a liability upon the board of directors if they issued any stock for less than par value led to many subterfuges in an effort to make the issue legally "full paid." One of the common practices was to issue blocks of stock as fully paid for property which was given highly inflated values, or to give a fabulous value to "good-will," "patent rights," or other intangible assets.

A corporation which issues stock of no par value need not resort to any subterfuge in order to prove legal full payment. Stock issued at no par value may be sold at any price acceptable to the corporation, usually decided upon by the Board of Directors. When shares are issued with no par value, the investor is at least put on his guard to ascertain the real value of the shares and the company issuing them.

Since 1912 many States have passed acts similar to the one in New York, permitting the issuance of shares without par value. The law regarding no par value stock varies in the several

States. While the stock is said to be without par value, many States have insisted on a minimum nominal value. This minimum in several States is five dollars per share.

The recording of stock without par value offers several problems to the accountant. In the cases of no par value stock, the *Authorized Capital Stock* and the *Unissued Capital Stock* accounts cannot be placed on the books, since its value cannot be determined until it is sold. When the shares are sold, however, the amount received should be placed to the credit of *Capital Stock* account. To illustrate this let us assume the following case:

CASE I — STOCK ISSUED WITHOUT PAR VALUE

Suppose the Thompson Construction Company is authorized to issue 5000 shares of stock without par value and the first sale is 1000 shares at $62.00 a share.

The journal entry would be as follows:

General Journal

Cash	$62,000.00	
Capital Stock		$62,000.00
To record the sale and issue of 1000 shares of no par value stock at $62.00 a share.		

NO PAR STOCK ON THE BALANCE SHEET

On the balance sheet of the Thompson Construction Company the *Authorized* and *Unissued Capital Stock* accounts would be as follows:

Assets		*Liabilities*		
Cash	$62,000.00	*Net Worth*		None
		Capital Stock —		
		No par value —		
		Authorized	5,000 shares	
		Less Unissued	4,000 shares	
		Outstanding	1,000 shares	
				62,000.00
	$62,000.00			$62,000.00

NO PAR SUBSCRIPTIONS

When no par value stock is sold through subscriptions the same procedure is followed as with par value stock except that the subscription contracts are entered on the books at the sale price of the stock.

TREASURY STOCK

Treasury stock is the company's own stock which has been once issued, and fully paid, and which has been reacquired by the corporation by some means other than forfeiture, usually through purchase or donation.

Treasury stock must not be confused with unissued capital stock. Unissued stock is stock of the corporation that has never been issued to anyone, while treasury stock is stock that has been once issued and fully paid before it is reacquired. Unissued stock cannot be sold and issued as full-paid by the corporation unless the corporation receives the full par value in either cash, property, or services. The corporation, on the other hand, may dispose of treasury stock at any price it chooses because these shares were once issued as fully paid.

Treasury stock may come into existence in several ways. A very common method of acquiring treasury stock is for a corporation to have issued a block of its stock in payment for some potentially valuable asset, such as a new patent, and then have the inventor who is interested in the success of the corporation donate back certain shares to be sold by the corporation for working capital. This stock, having been once fully paid, may be sold below par, and the directors of the corporation will be entirely free from liability.

Let us see the accounting required when treasury stock is acquired under these conditions:

Case 1 — Treasury Stock by Donation. — Suppose the Lamb Safety Razor Company, Inc., is organized to manufacture and sell a newly patented safety razor, and that Mr. F. Lamb, the inventor, assigns his patent to the corporation for $100,000.00. He receives 1000 shares of the company's common stock as full payment for the patent and subsequently donates back to the company 500 shares for the purpose of advertising his safety razor.

The following entries will be written to give effect to the facts above:

GENERAL JOURNAL

—1—

Patent Rights	$100,000.00	
Unissued Capital Stock		$100,000.00
To record the purchase of the patent rights from Mr. F. Lamb for $100,000.00 paid for by issuance of 1000 shares of Capital Stock.		

—2—

Treasury Stock	$ 50,000.00	
Surplus for Advertising		$ 50,000.00
To record receipt of 500 shares from Mr. Lamb to be sold to provide funds for advertising.		

Let us assume, at this point, that the company is able to dispose of the entire 500 shares of stock for $30,000.00.

Cash	$ 30,000.00	
Surplus for Advertising	20,000.00	
Treasury Stock		$ 50,000.00
To record sale of Treasury Stock to X for $30,000.00.		

In this illustration, when the 500 shares were donated back to the corporation, the stock was treated as *Treasury Stock* and its par value credited to the *Surplus for Advertising*. This is done so that the money received from the sale of the stock will be used as requested by the donor. If the value of these shares were entered to the credit of the general surplus account, then these funds would be available for distribution as dividends and thus possibly defeat the purpose of the donor.

It is, therefore, good accounting practice for the corporation to credit the value of the donated shares to some "ear-marked" *Capital Surplus* account, such as the one used in the foregoing illustration. When the stock is subsequently sold, the true value of this surplus is determined, and adjusted in the entry recording the sale of the stock. In the case above, the stock which had a $50,000.00 par value brought $30,000.00, and therefore the Surplus for Advertising account was written down to its true value.

Case 2 — Treasury Stock by Purchase. — Treasury stock may result from the corporation purchasing back part of its own stock in the open market. This is commonly done and is very often good business, because quite frequently the book value of a stock may be considerably higher than the market price. The Board of Directors may authorize the treasurer or other officer to buy shares when such conditions prevail. This stock may then be held in the treasury until the market price rallies and, perhaps, a handsome profit may be realized.

To illustrate this procedure and the accounting required let us assume the following facts:

The Lamb Safety Razor Company, Inc., now a successful manufacturing organization, has cash available, and a good surplus. The book value of its shares is $106.00, while the stock is quoted at $84.00 a share. The Board of Directors, therefore, vote to buy 1000 shares of its stock at $84.00, which purchase is immediately executed.

The following journal entry will record the purchase:

General Journal

Treasury Stock	$100,000.00	
Cash		$ 84,000.00
Treasury Stock Surplus		16,000.00
To record the purchase of 1000 shares of the Lamb Safety Razor stock as per resolution of the Board of Directors at $84.00 per share.		

This entry will show the receipt of the shares and the reduction in cash. The stock is recorded at par and the difference is credited to the *Treasury Stock Surplus* account.

Let us assume further that three months later the market price is $96.00, the Board of Directors order the 1000 shares sold, and the order is promptly executed.

At this time the following entry should be written:

General Journal

Cash	$ 96,000.00	
Treasury Stock Surplus	4,000.00	
Treasury Stock		$100,000.00
To record sale of 1000 shares of treasury stock at $96.00 a share as per order of Board of Directors.		

After this entry has been posted, the credit balance of $12,000. in the Treasury Stock Surplus account should be transferred to the General Surplus account.

Treasury Stock Surplus	$ 12,000.00	
Surplus		$ 12,000.00
To transfer profit on sale of treasury stock to general surplus account.		

This entry is entirely proper because the profits from this operation belong to all stockholders alike; and, as a matter of fact, the entire transaction was made possible only through the fact that a general " surplus " existed.

INCORPORATING A PARTNERSHIP

Let us suppose that X, Y, and Z, who have been successfully conducting the X–Y–Z partnership for a period of years, decide to incorporate. They organize the Excelsior Company, Inc., under the laws of the State of New Jersey, with an authorized Capital stock issue of $200,000.00 — all common shares with a par value of $100.00.

X, Y, and Z, the incorporators of the Excelsior Company, Inc., each subscribe for ten shares and pay cash in full for their subscriptions. The stock is issued to the subscribers, who form the first Board of Directors, after the legal formalities have been completed. They decide to take over the partnership business of X, Y, and Z, paying the partners with shares of capital stock at par for their interest as indicated on the following balance sheet:

X–Y–Z Partnership

Balance Sheet as of Nov. 1, 19—

Assets		*Liabilities*		
Cash	$10,000.00	Accounts Payable		$28,000.00
Accounts Receivable	40,000.00	Mortgage Payable		30,000.00
Inventory	20,000.00	Sundry Liabilities		2,000.00
Plant and Fixed Assets	60,000.00	*Total Liabilities*		$60,000.00
Sundry Assets	20,000.00	*Net Worth*		
		X Capital	$45,000.00	
		Y Capital	25,000.00	
		Z Capital	20,000.00	
		Total Net Worth		$ 90,000.00
	$150,000.00			$150,000.00

The partners accept the offer and the following entries are written first on the books of the corporation to record these facts:

–1–

Unissued Capital Stock	$200,000.00	
Capital Stock		$200,000.00
To record the authorized issue of Capital Stock — 2000 shares at par $100.00.		

–2–

Cash	3,000.00	
Unissued Capital Stock		3,000.00
To record payment of stock subscription from Mr. X, Mr. Y, and and Mr. Z. Each takes 10 shares and gives his check in full payment and their certificates are issued.		

–3–

Cash	10,000.00	
Accounts Receivable	40,000.00	
Inventory	20,000.00	
Plant and Fixed Assets	60,000.00	
Sundry Assets	20,000.00	
Accounts Payable		28,000.00
Mortgage Payable		30,000.00
Sundry Liabilities		2,000.00
Unissued Capital Stock		90,000.00
To record the assets and liabilities of the X–Y–Z partnership taken over as per resolution of the Board of Directors, and the issuance of 900 shares of Capital Stock to the partners in payment of their respective interests.		

At this point it might be interesting to observe the balance sheet of the corporation. It is illustrated on the opposite page.

The student will note the similarity of the balance sheet of the partnership and that of the newly formed corporation. The only difference is that the *net worth* section of the incorporated company is represented by *Capital Stock* instead of through *Partners' Capital* accounts. In the new company the assets are exactly the same as before except, of course, that the $3000.00

the incorporators (former partners) paid into the business has been added to the total assets. The net worth section, however, reflects a similar increase. This case was purposely simplified, but in general illustrates the principles involved when a corporation takes over a going concern.

EXCELSIOR CORPORATION

Balance Sheet as of Nov. 2, 19—

Assets		*Liabilities*		
Cash	$13,000.00	Accts. Payable	$28,000.00	
Accounts Receivable	40,000.00	Mort. Payable	30,000.00	
Inventory	20,000.00	Sundry Liab.	2,000.00	
Plant and Fixed Assets	60,000.00	*Total Liabilities*		$ 60,000.00
Sundry Assets	20,000.00			
		Net Worth		
		Authorized Capital Stock	$200,000.00	
		Less Unissued shares	107,000.00	
		Issued and Outstanding		93,000.00
	$153,000.00			$153,000.00

QUESTIONS ON THE CHAPTER

1. (*a*) Define a corporation.
   (*b*) What are its attributes?
   (*c*) Give in summary form the advantages and disadvantages of the corporate form of organization.
2. Distinguish between:
   (*a*) Common capital stock and preferred stock.
   (*b*) Cumulative and non-cumulative preferred stock.
   (*c*) Participating and non-participating preferred stock.
3. Differentiate between forfeited stock and treasury stock.
4. If preferred stock does not mention whether it is cumulative or non-cumulative, how is the stock considered?
5. List some of the important questions to be answered in filling out an application for a charter.
6. (*a*) What is the minimum number of persons required to form a corporation?
   (*b*) What is a one-man corporation?
7. What is no-par value stock? Describe fully.
8. Outline the entries required to record:
   (*a*) Authorized capital stock $500,000 common par value $100.00 per share.

(*b*) Jones, Farrell, and Boyce each subscribe for 100 shares, each paying his subscription in cash in full.

9. (*a*) What accounts are usually required to record subscriptions payable in installments?

(*b*) Give the functions of each account.

10. Explain the procedure necessary to forfeit subscriptions after the subscriber has defaulted in his subscription.

11. Explain two methods of acquiring treasury stock by a corporation.

12. Explain the difference between the *Net Worth* section of a balance sheet for a partnership and the *Net Worth* section of a corporation balance sheet.

PROBLEM MATERIAL

Problem 1

W. Baker, J. Clark, and T. Dugan, who have been partners, now wish to incorporate as the B. C. D. Co., Inc., and through their attorney file an application for a charter under the laws of the State of New Jersey. Mr. Baker agrees to take 10 shares of stock, Mr. Clark 8 shares, and Mr. Dugan 5 shares. The application for charter requests the right to issue 2000 shares of common capital stock with a par value of $100.00 each.

November 1: The charter has been approved and the original subscribers give certified checks for the stock subscriptions.

Required:

(1) The journal entries to open the books, showing one entry for the authorized issue and one for the original subscribers' payment of their subscriptions, together with the issuance of the stock.

(2) Draw a balance sheet for the corporation, after giving effect to the journal entries above.

Problem 2

Asume the Board of Directors of the B. C. D. Co., Inc., in Problem 1 have passed a resolution approving the purchase of the business formerly conducted by Messrs. Baker, Clark, and Dugan as a partnership. The basis for the purchase agreement is the Balance Sheet listed below. The partners agree to accept common capital stock of the corporation at par for their net interests in the partnership.

BAKER-CLARK-DUGAN PARTNERSHIP

Balance Sheet as of November 1, 19—

Assets		*Liabilities*	
Cash	$ 6,417.00	Accounts Payable	$12,500.00
Accounts Receivable	15,523.00	Notes Payable	3,000.00
Notes Receivable	4,000.00	Mortgage Payable	20,000.00
Land	3,000.00	*Total Liabilities*	35,500.00
Buildings	40,000.00		
Inventory	13,060.00	*Net Worth*	
Office Equipment	1,200.00	Baker Capital	$20,000.00
Sundry Assets	300.00	Clark Capital	16,000.00
		Dugan Capital	12,000.00
	$83,500.00		$83,500.00

Required: Journal entries to record the purchase of the partnership business by the corporation. Give all journal entries required with adequate explanations for each entry.

PROBLEM 3

Assume the B. C. D. Co., Inc., wish to sell their stock to the public and have engaged Mr. Frank Brock to solicit a selected list of friends of the Directors. The terms of the subscription contracts are 10% cash with the signed contract and the balance payable in three equal monthly installments. At January 15 Mr. Brock has completed his canvass and turns in signed contracts from sundry subscribers totaling 600 shares, together with checks in total of $6000.00. The Board of Directors accepts the subscriptions and pays Mr. Brock $600.00 which is to be charged to Organization Expense. The balance of the subscriptions are payable February 15, March 15, and April 15, after which the stock is to be delivered to all fully paid subscribers.

Required:

(1) The journal entry for the payment of Mr. Brock.

(2) The journal entries for the subscription and issuance of the stock, assuming all installments are received in full on or before the due dates.

PROBLEM 4

January 3.

Frank Smith, Henry Thomas, and John Jones, all residents of the State of New York and citizens of the United States, have received a Corporation Charter from the State of New York. The Charter is issued to the Smith-Thomas Company Inc., and permits the Company to issue 5000 shares of common capital stock with par value of $100.00 per share. The original subscribers on this day give their certified checks for full payment of the shares subscribed as follows: Mr. Smith 100 shares, Mr. Thomas 100

shares, and Mr. Jones 5 shares. The Company is organized and the treasurer accepts the checks, and issues the stock certificates.

January 15.

In accordance with proper action of the Board of Directors, subscriptions to 400 shares of stock have been accepted at par, payment to be 10% with subscriptions contract, and 30% each succeeding month until the balance is paid in full. Checks totaling $4000.00 are received with the contracts.

February 15.

Checks totaling $12,000.00 are received, being the full payment due on installment No. 1.

March 15.

Checks totaling $11,850.00 are received, being payment due on installment No. 2 from all subscribers except Mr. F. Johnson, who subscribed to 5 shares and who has paid his 10% down payment and Feb. 15 installment.

April 15.

Checks totaling $11,610.00 are received, being payment of installment No. 3 from all subscribers except Mr. Johnson, who defaults once again, and Mr. Sherman, who also fails to remit for his third and final installment on 8 shares subscribed for, and upon which he had paid the first and second installments as well as the 10% down payment. All stock fully paid is issued as of this date.

May 1.

Notices have been sent to both Mr. Johnson and Mr. Sherman that their shares will be forfeited and sold to pay for their contracts unless they pay within 30 days.

May 31.

Mr. Johnson has failed to reply, while Mr. Sherman requests that you sell all his shares at auction remitting to him any surplus. The shares are sold at auction and bring $70.00 per share for a total of $910.00. The expenses of sale amount to $70.00 and are to be charged equally to each of the defaulting subscribers. The shares of Johnson and Sherman are canceled and a new certificate issued to the purchaser who bid the 13 shares at $70.00 per share.

Required:

(1) All journal entries required to give effect to above, with proper explanations. Include the organization, sale of shares to the original subscribers, and the complete entries for the forfeiture, all as indicated in the description above.

(2) Prepare ledger accounts for:

Unissued Capital Stock; Subscription Contracts Receivable (Control); Individual accounts for the two defaulting subscribers; an account for Forfeited Stock; and Forfeited Stock Surplus.

(3) Post all journal entries affecting the accounts above.

CHAPTER XVII

RECORDS AND ACCOUNTS PECULIAR TO THE CORPORATION

RECORDS PECULIAR TO A CORPORATION

When a corporation starts business it must be prepared to operate a good set of accounting records. These records may be divided into two groups. The first consists of those records which every organization must keep in which the routine bookkeeping is done, consisting of the usual journals and ledgers. The second group, as we might divide them, are those records which are peculiar to the corporation. The principal books in this latter group are: (1) *The Minute Book;* (2) *The Stock Certificate Book;* (3) *The Stock Ledger;* (4) *The Transfer Book;* (5) *The Subscriptions Book.*

THE MINUTE BOOK

This book is required by law. It has no particular form; any ordinary blank book will answer, and no objections should be raised to the loose-leaf type of book. The minute book should contain a brief history of the corporation in chronological order. Every important item of business transacted by the Board of Directors, or at the meetings of stockholders, should be recorded. The book should be started with a record of the first meeting of the stockholders, and followed by records of all subsequent regular and special meetings of the Board of Directors and stockholders. Unless the charter and by-laws of the corporation are separately bound, a copy of these papers may be incorporated in this book, as is often done by the smaller corporations.

THE STOCK CERTIFICATE BOOK

The up-to-date stock certificate as prepared by the leading bank note companies is a single instrument; that is, it is made up without a "stub" and is prepared in loose form, numbered consecutively. On the face of the stock certificate are usually printed the certificate number and the number of shares repre-

sented by the certificate, together with a brief legend regarding the corporation. The owner's name is registered and the seal of the corporation affixed, together with the signature of the president and often one other officer, such as secretary or treasurer. On the reverse side of the certificate is printed the standard assignment form, which must be filled out before the stock may be transferred from one owner to another. The assignment is made by the registered owner signing his name on the assignment form. He may " fill out " the blanks showing the name of the person or persons to whom he is transferring his stock, together with the shares assigned to each, or he may assign " in blank " and then the certificate may circulate freely. While it is in circulation, the ownership will continue to be registered in the name written on the face of the certificate until the new owner's name is filled in and the certificate presented at the transfer offices of the corporation.

The regular or " stock " forms for certificates of stock are usually prepared in quantity by wholesale stationers, and often small corporations will use these ready-made certificates. Forms are available for both common and preferred stock. The stationers then simply print in the name of the corporation. These ready-made certificates are made up in book form, with a perforation for separating the actual certificate from its stub, on which appears the pertinent information such as the date of issue, in whose name the certificate is registered, and to whom the certificate is delivered. This procedure is still followed by those smaller corporations acting as their own transfer agent, but is not used where a bank or trust company is acting as a transferring agency.

The modern method of controlling stock certificates, as practiced by the leading trust companies, is by use of a ledger in which are recorded the total certificates originally received, indicating them by numbers and showing by number the daily use of them. In the event that any certificates are canceled in error, notation is also made of this fact so that the bank or trust company can at all times determine exactly the certificates outstanding in hands of holders. Certificates received for the purpose of transfer are, of course, canceled, record being made of their number and registration, and placed in the vaults of the bank or trust company, where they are kept for two years or

more, after which time the shares may be returned to the corporation for further holding, in compliance with the Statute of Limitations. If outstanding certificates are exchanged for any purpose, their cancelation on presentation is effected as though they were presented for purpose of transfer. The unused certificates of any particular class, after their use is prohibited by resolutions of the corporation, are usually cremated by the bank note company which manufactured them, who also prepare a formal cremation certificate for the files of the corporation.

The old method of signing stock certificates manually by officers of the issuing corporation is gradually becoming modernized by the use of facsimile signatures. Legislation of some thirteen States at the present time authorizes the use of facsimile signatures by corporations obtaining their charter in the particular State, and also covers the use of a facsimile seal, thereby eliminating a vast amount of manual labor in the signing and affixing the corporation's seal to the stock certificates.

THE STOCK LEDGER

The stock ledger has likewise changed considerably from the old method of posting the stockholder's name and address in a so-called *Stock Ledger*. The modern bank or trust company uses modern labor-saving machinery which enables it to record the various stockholders by machine on small ledger sheets, which machine also computes the holdings as they undergo changes from time to time. The operation of this machine is of such a nature as to prohibit its being explained in writing except to say that on the issuance of a stock certificate to a particular party, a record is made on a small ledger sheet similar to the form illustrated on the following page.

On this form appear not only the stockholder's name, but the address and the number of shares held, also any information that might pertain to the forwarding of dividends, proxies, and notices of meetings. As the number of shares is diminished or increased, the necessary change is made on the ledger sheet, so that at a glance the holdings of a particular holder can be ascertained at any time. In handling some of the larger corporations, where stockholders number around sixty to eighty thousand, the stock books are segregated as to the alphabet, pro-

viding total holdings by "letter" and dividends are prepared in a similar manner so as to lessen errors and discrepancies.

Form No. 1

NAME OF CORPORATION

Certificate Surrendered				Certificate Issued				Credit Balance
Date	Number	√	Shares	Date	Number	√	Shares	
							Forward	

THE SUBSCRIPTIONS BOOK

Beside the records just revealed, a subscriptions record is also maintained. If the corporation acts as its own subscription agency, a subscription list is usually kept, which is subsequently posted to the subscription ledger which will be a permanent record of all subscriptions the corporation receives from stockholders or the general public. Where a bank or trust company acts as agent in the receiving of subscriptions, however, it has become the practice to use what is called the "subscription circular." This circular is prepared with name, address, and number of shares subscribed. Or separate contracts may be mailed to each prospect. After these circulars or individual contracts have been returned, they are arranged alphabetically, and serve the purpose of a subscriptions journal.

If the corporation has been chartered before the subscription contracts have been signed, then the subscriptions become binding agreements between the parties thereto, and either the corporation or the subscriber may, if necessary, bring suit for specific performance.

THE TRANSFER BOOK

In modern practice the record of transfers of stock is accomplished by the use of a *Transfer Sheet* or *Control Sheet* as it is known in the transfer department. An illustration of a con-

trol sheet used by the Guaranty Trust Company of New York is shown below.

On this sheet is recorded full detail as to certificates surrendered for transfer and the new certificates issued in lieu thereof. The stockholder's name appears in the column designated for the purpose of showing the certificate canceled and the certificate issued, with the address showing under "certificates issued," because such holder will be a new account for the stock ledger. The number of shares is shown in both instances, enabling the sheet to be proved in total. This sheet is made with one original and five copies. Copies are given to various divisions interested, including one copy to the bookkeeping department where proper entries are made of the transfers. A copy is also mailed to the principals so as to keep them advised of the activity of their shares and, as the case may demand, copies are also furnished to co-agents in cities other than that of the issuing agent.

The undersigned, owners and holders of the shares of the CAPITAL STOCK of the above-mentioned Company, for value received, do hereby by our respective Attorneys duly appointed respectively assign said shares of such CAPITAL STOCK in the manner below set forth.

CONTROL SHEET

Certificates Surrendered	Cert. No.	No. of Shares			Certificates Issued	Cert. No.	No. of Shares
		N.Y.					
1					1		
2					2		
3					3		
4					4		
5					5		
6					6		
7					7		
8					8		
9					9		
10					10		

ACCOUNTS PECULIAR TO THE CORPORATION

Just as certain books are peculiar to the operation of a corporation, so also are there certain accounts peculiar to the corporation.

In the unincorporated company the term *Net Worth* refers to the difference between assets and liabilities.

$$A - L = N\,W$$

In the corporation the same is true, except that *net worth* now has a somewhat broader and more extensive meaning. If we think of the fundamental definition of *net worth*, we recall that net worth was described as the owners' equity in the business, and that such equity was really only an accountability, that the business did not owe the amount designated by net worth to the proprietors in the same sense that it did to the firm's creditors. If we can bear in mind this distinction between net worth and liability, we shall have no trouble in understanding the several accounts which make up the net worth structure in the corporate form of organization. In general, the *Net Worth* of a corporation is made up of two elements, the *Capital Stock* and the *Surplus*. The capital stock group will consist usually of several accounts rather than just one. It was said in the last chapter that care must be taken in selecting names for accounts dealing with capital stock. This will be evident here from the accounts we are now going to present.

CAPITAL STOCK

The *Capital Stock* account is created by means of the opening entry, when *Unissued Capital Stock* is debited and *Capital Stock* is credited. The purpose of the account is to show the amount of stock authorized by the charter. If more than one class of stock is authorized in the charter, then separate accounts for each class should be maintained, appending the appropriate designation — " common " or " preferred " — to the account title. The *Capital Stock* account will always have a credit balance as long as the corporation is in existence. It will be further credited with any subsequent additions to the authorized issue, and debited should the authorized issue be decreased.

The *Capital Stock* account will appear under the *Net Worth* section of the balance sheet, but will be offset by the *Unissued Capital Stock* account.

UNISSUED CAPITAL STOCK

This account, like the *Capital Stock* account, comes into existence with the opening entry of the corporation. Similarly, there may be unissued common and unissued preferred capital stock; and, where both classes of stock are in use, it will be well to keep the two classes separate by the proper appendment of the word *common* or *preferred.* The *Unissued Capital Stock* account is debited in the opening entry with the total par value of all stock authorized, and reflects the amount of capital stock available for issue. As the stock is sold the account is credited with the par value of all shares issued. The resulting balance will measure the par value of all capital stock still available for sale. The account should not be treated as an asset on the balance sheet, even though it has, as a matter of fact, several characteristics of an asset. It is better shown on the balance sheet as a deduction from the *Capital Stock* account, because in this manner it is possible for the reader of the balance sheet to see at a glance three things: the authorized issue, the amount still unissued, and the amount outstanding, of each class. This may be shown as follows, under the *Net Worth* section of the balance sheet:

Net Worth

Authorized Capital Stock — Common:		
10,000 shares par value $100.	$1,000,000.00	
Less Unissued Capital Stock	400,000.00	
Issued and Outstanding		$600,000.00
Authorized Capital Stock — 8% Preferred:		
10,000 shares par value $100.	$1,000,000.00	
Less Unissued Capital Stock	250,000.00	
Issued and Outstanding		$750,000.00

In addition to this the remainder of the *Net Worth* section known as *Surplus* will appear.

SURPLUS AND DEFICIT

The *Surplus* account represents the excess of assets over total Liabilities plus Capital Stock outstanding. It is usually the result of accumulated earnings not distributed to the stockhold-

ers in the form of dividends. Should the total capital stock outstanding exceed *Net Worth* in our fundamental equation, then there is a *Deficit*. This account may be shown on the balance sheet on the asset side in red or in italics to indicate its true character, and that it appears on the asset side only to balance the statement, or better deducted from the *Net Worth* section to agree with total assets.

The *Surplus* account comes into existence at the close of the first accounting period, should the corporation's operations result in a profit. The final closing entry for a corporation is a transfer of any credit balance in the *Profit and Loss* account to *Surplus*. So it is that the *Surplus* account measures the accumulated earnings of the corporation. Corporations may use several surplus accounts, but where more than one are in use, then all other than the *General Surplus* account should be appropriately labeled — as *Treasury Stock Surplus, Surplus for Advertising,* both special *surplus* accounts explained in the last chapter. The *General Surplus* account is kept primarily for the purpose of exhibiting the undivided profits of a corporation. This account should be credited with any earnings at the close of the accounting period and should be debited if there is a loss from operations. This debit would, of course, be contingent upon the existence of a surplus; for, should there be no surplus in existence, then obviously the *Deficit* account must be resorted to. The *Surplus* account is also debited with the amount of any dividends declared by the corporation. The balance will then show the undivided profits of the corporation.

STATEMENT OF SURPLUS

In Chapter III a sole proprietor's *Statement of Capital* was explained and illustrated. Often in a corporation changes will take place in the corporation's surplus between periods. Such changes call for the preparation of an auxiliary statement known as the *Statement of Surplus*.

Illustration

HAWKINS MANUFACTURING COMPANY

Statement of Surplus, December 31, 19—

Balance at January 1, 19—		$60,000.00
Add Increases during period		
Error in inventory, understated January 1		2,000.00
Profit for year as per Profit and Loss Statement		26,410.00
		$88,410.00
Deduct		
Additional Tax prior year	$ 460.00	
Account Payable not entered	120.00	
Dividends Preferred Stock	12,000.00	
Dividends Common Stock	18,000.00	
		$30,580.00
Balance as per Balance Sheet December 31, 19—		$57,830.00

DIVIDEND ACCOUNTS

A dividend is a distribution of part of a corporation's earnings to the stockholders. Dividends may be paid legally only from earnings. It is improper to declare dividends where no surplus exists, and illegal where the corporation is insolvent. Should dividends be paid improperly they may be recovered, for their payment is a fraud on the creditors.

DIVIDENDS PAYABLE IN FOUR FORMS

(1) *Cash.*—The cash dividend is the most usual and is declared payable in cash when a fund of cash is available or will be available on the day set for payment of the dividend. Under certain circumstances it is proper for a corporation to borrow cash to pay a dividend if its immediately available cash is not sufficient. However, it should not impair its working capital by so doing or threaten the solvency of the corporation. Such a payment would be illegal.

(2) *Dividend Payable in Scrip.*—If a corporation has a proper surplus from which to declare a dividend, but sufficient cash is not available, then the Board of Directors may pay the dividend in scrip. Scrip is a short-term promise to pay in the future and is used generally when funds will be definitely available at some early future date, as by the conversion of some property held by the corporation.

(3) *Bonds.* — A corporation may issue bonds if it likes to pay a dividend, or any bonds on hand might be sold and the proceeds used to pay a cash dividend.

(4) *Stock Dividends.*—In most States the payment of a dividend in the corporation's capital stock is legal. There must, of course, be surplus profits against which the dividend is issued. It is not, however, a true dividend, for it neither decreases the assets of the corporation nor increases the assets of those who receive it. As to the corporation, it merely converts surplus into shares of capital stock. As to the stockholder, it simply changes the form of his investment by increasing the number of shares, at the same time reducing the amount of surplus available for dividends. The stockholder is theoretically no better off, because, while he holds more shares than before the stock dividend was paid, the book value of each share has been diminished, leaving the aggregate value of all his stock substantially the same. Practically, however, if a sound company declares a stock dividend, and if the same dividend rate is maintained in subsequent years, the market value of each share will drop but little and the market value of the individual's stock holding will be proportionately greater.

STOCK DIVIDENDS ON NO PAR SHARES

The nature and effect of a stock dividend declared on shares without par value would depend upon the conditions of each particular case. One thing, however, is certain: the net worth of a corporation paying such a stock dividend will not change. Such a dividend merely means that each shareholder will have a larger number of shares each of a proportionately smaller value. If, however, the Board of Directors transfer part of the surplus to the *Capital Stock* account as they presumably would, the result would be the capitalization of surplus as in the case of a dividend paid in par value stock.

The amount to record for no par stock dividends varies because of the different values at which no par stock is recorded in the *Capital Stock* account when issued originally. In States that require a minimum issuing price, it is necessary to transfer an amount equivalent to the product obtained when the minimum share price is multiplied by the number of shares to

be issued; the Board of Directors may, of course, authorize the transfer of a larger amount.

BOARD OF DIRECTORS DECLARE DIVIDENDS

The declaration of a dividend is within the powers of the Board of Directors and they may, or may not, declare dividends at their own discretion. The courts give the Board of Directors wide discretion on this point; and, even though profits have been made, a court will not compel the declaration of a dividend unless there is very clear evidence of bad faith on the part of the Board. It is to be remembered, however, that a corporation is organized for a profit and this purpose cannot be indefinitely defeated by a Board of Directors. Therefore, a court of equity in a proper case will compel the declaration of dividends.*

NOTICE OF DIVIDENDS

The Board of Directors have full power to fix the time and the place of payment of dividends, but they must give the stockholders due notice.

Dividends are payable at a date set forth in the Board of Directors' declaration, and immediately become a liability or debt of the corporation. If a dividend is once declared, and not paid, a stockholder can sue as on any other debt. A dividend is usually made payable at a future date. It may be declared October 15th and be payable November 15th. Dividends are payable only to those who are stockholders at the time of its declaration. Usually the transfer books of a corporation are closed for a brief period, so that a list of the registered owners of the stock may be compiled and certified by the transfer agent to the corporation.

DIVIDENDS ON PREFERRED STOCK

Dividends on preferred stock must, as a rule, be declared upon the preferred shares if there are profits available. The Board of Directors has less discretion in the payment of preferred dividends, because of the fundamental concept of the contract existing between the corporation and the holders of

* *Spear* vs. *Rockland-Rockport Lime Co.*, 113 Me. 285, 93 Atlantic Reporter 754.

preferred shares. The Board of Directors undoubtedly has some discretion in the matter, usually in determining whether or not a true profit exists, i.e., whether all proper expenses have been charged, including provision for doubtful accounts, and depreciation on the fixed assets. If the preferred capital stock is non-cumulative and the preferred dividend is "passed" in any year, the passed dividend does not carry over to succeeding years, but is lost. Such a non-cumulative preferred stock is obviously very undesirable. It must be remembered, as mentioned previously, that preferred stock is cumulative unless otherwise stated. If a dividend on cumulative shares is "passed" and the company becomes prosperous again and reaches a point where dividends are available, the accumulated dividends on the preferred shares are a prior claim and must be paid or disposed of in some other way before dividends may be paid to the common stockholders.

ACCOUNTING FOR DIVIDENDS

Case 1. — Suppose the Thompson Manufacturing Company has a surplus of $20,000.00, and has outstanding 1000 shares of $100 par value common stock. The Board of Directors on April 15th decided to declare a dividend of six per cent payable in cash, to all holders of record May 1st and payable May 15th. The entries required on the books will be as follows:

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April 15th		
Surplus	$6000.00	
Dividends Payable		$6000.00
To set up the 6% dividend declared this day by resolution of the Board of Directors payable May 15th to holders of record May 1st.		
May 15th		
Dividends Payable	$6000.00	
Cash		$6000.00
To record the payment of dividend No. .... to holders of record May 1st as per list from X Trust Company, transfer agent.		

From these entries it will be evident that *Dividends Payable* is a liability account, and, should the corporation close its books before the dividends are paid, this liability would appear on the balance sheet.

In this case it was assumed the Thompson Manufacturing Company had available cash to pay the dividend.

Case 2. — As a second case, suppose the Thompson Manufacturing Company, although having a surplus of $20,000.00, has not $6000.00 available in cash. It may either borrow the money from the bank or issue scrip. Such scrip will be payable at a definite future time and until redeemed will constitute a liability. The journal entries, when scrip is used, will be the same as for the cash dividend except that *Dividend Scrip* account will be substituted for the account *Cash* as the credit in the second entry. The corporation under these same conditions could also pay the dividend in stock. The entries required here again would be the same as before, except that the credit in the second entry would be made to *Unissued Capital Stock,* or *Treasury Stock,* as the case may be, instead of to *Cash.*

BONDS

Peculiar to a corporation, also, are the accounts required when the corporation issues bonds.

Besides being able to raise funds by the sale of its capital stock, a corporation is also given the right to sell bonds. A bond might be defined as a long-time promissory note issued under seal by a corporation, usually secured by a mortgage on some fixed assets, as a guarantee of payment.

Corporation bonds are to be distinguished from the real estate "bond and mortgage." In the real estate bond and mortgage the two principals involved are the mortgagor, or the party borrowing, and the mortgagee, the party lending the money. The mortgagee holds the bond (or promissory note) and the mortgage. If the terms of the bond are violated, he carries the mortgage and may foreclose, or pursue that line of action, which in his judgment will best serve in enforcing the conditions of the bond and mortgage. In this respect it may be necessary to call a meeting of the bond holders to aid in determining the best course to follow.

In the case of the corporation "bond" there is also a bond and mortgage, but obviously each bondholder could not hold the mortgage; therefore, in the corporate bond, a trustee, usually a bank or trust company, is named to represent the bondholders and see that their interests are protected.

Bonds may be registered or coupon bonds. Coupon bonds are bonds having attached coupons calling for the regular quarterly or semi-annual payment of interest. Thus, if a company issues a twenty-year coupon bond, upon which the interest is payable quarterly, eighty coupons will be made part of the bond and each will bear the appropriate date and amount of interest, and will be clipped and presented for payment to the issuing corporation or its agent. Registered bonds, on the other hand, have no coupons attached, but are registered in the owner's name and regular interest checks are mailed to the registered owner. Bonds are usually issued in $1000. amounts although today "baby bonds," those issued for $500. or $100. and even smaller amounts, are becoming quite popular. Coupon bonds are negotiable just like any bearer instrument. Registered bonds, although also negotiable, require a transfer of the registration on the books of the corporation.

When a corporation decides to issue bonds, certain legal formalities must be complied with and the laws of the State in which the corporation is chartered must be followed. The charter and by-laws must also be complied with. Should the corporation have an issue of preferred stock outstanding, then permission is usually required from that group of stockholders before any bonds may be authorized.

Bonds to be listed on the New York Stock Exchange must be printed and engraved by an approved bank note company and meet other regulations as to uniform size, and registration. Similarly to the safeguarding of the issuance of stock, a registering agent, a bank or trust company, is given charge of the issuance of bonds. Bonds are numbered serially, and usually must be signed by two officers of the corporation issuing the bonds and endorsed by the bank or trust company acting as registrar before the issue is valid. All of this is done to protect the public from counterfeiting or the overissuance of bonds authorized.

SOME USUAL FORMS OF BONDS

A complete classification of bonds would be a far too extensive proposition for any elementary text on accounting; therefore, only the most usual forms will be briefly discussed here. Bonds may be generally grouped as: (1) Government bonds, including Federal, State, and other municipal corporation bonds, (2) Industrials. This group includes all private bonds except the third group known as (3) Utility bonds, those issued by the large public utility corporations. Another distinction is between secured and unsecured bonds. So-called unsecured bonds are those for which no tangible assets have been pledged, whereas secured bonds do have particular property pledged as security.

The following brief description of some of the more common types of bonds in use today may be helpful in our study of accounting for bonds.

Debenture bonds. — Debenture bonds are bonds not secured by a specific lien, that is, with no security other than the general assets and credits of the issuer.

All government, state, and municipal bonds are debenture bonds, not being secured by mortgages or other specific pledge of assets.

Private corporations, however, also use debenture bonds upon occasion. Their strength depends upon the general strength of the issuing company and the equity in the general assets over other bonds having prior lien. Their certainty of receiving their interest regularly depends upon the size and regularity of the excess of annual earnings over the amount required to meet prior charges.

First mortgage bonds. — These are, of course, secured bonds, and will constitute a first lien on some certain specific assets of the corporation. There may be a second or a third mortgage bond, each issue, of course, being ranked as first, second, or third claims against the particular assets. Bonds bearing the names *First and Consolidated, First and Refunding, First and General Mortgage,* are confusing because of their titles. In the first place, they are not first mortgage bonds in the sense that they represent a first lien on all the property of the issuing com-

pany. They are secured by a first mortgage on a portion of the company's property, but on the remainder may be only second, third, fourth, fifth, or lesser lien, due to various existing underlying mortgages on different parts of the property. They become first mortgages on other parts of the property as they replace older bonds either by consolidation, refunding, or purchase. It is the usual intent that these bonds shall eventually replace those of all existing mortgages and thus in reality become a first lien on the entire property.

The term *General Mortgage Bonds* means bonds secured by a general or blanket mortgage on all the company's property, already subject in whole or in part to prior mortgages.

Redeemable bonds. — Bonds which by the terms of their issue may be called for redemption by the issuing company before the date of their maturity are known as redeemable or callable bonds. It is quite common to issue bonds which are redeemable at certain specified times, or within certain time limits, or upon certain notice. To compensate the holder for the loss of his investment, a redemption price somewhat above par value is usually set.

Convertible bonds. — Convertible bonds are those which are convertible at the option of the holder into other securities of the issuing corporation. The conversion privilege usually means the right to convert into preferred or common stock and set at a certain ratio, sometimes par for par, sometimes at a given figure as at 110, or 102, and so forth. When a company issues bonds convertible into stock, it must have authorized and available sufficient stock to make the conversion if required.

Serial bonds. — Bonds of a single issue, but made up of various groups with varying dates of maturity, are known as serial bonds. It is customary to divide the entire issue into a number of groups, having the groups mature successively at equally distant periods. The periods between maturities of the various groups are sometimes as small as six months and sometimes as long as several years. The system provides for systematic and gradual reduction of the issue. The entire issue bears the same rate of interest; hence if the bonds are sold below par and redeemed at par, the yield on the shorter-term ones will be larger than that on those of longer terms. The yield is generally made

uniform by arranging a varying scale of prices which constantly diminishes as the terms of the bonds increase.

Sinking fund bonds. — These are bonds issued under an agreement whereby the issuing corporation is required to set aside regularly out of earnings a sum which, with interest, will be sufficient to redeem the bonds at maturity. This gives the bondholders absolute assurance of a systematic provision for repayment of the loan. The sinking fund payments are obligatory, and failure to make them gives the bondholders the same rights as would default in an interest payment.

ACCOUNTING FOR BONDS

ORIGINAL ISSUE

After all the formalities of the issue have been met, the following journal entry, placing the authorized issue of bonds on the books, should be made:

–1–

Unissued Bonds	$500,000.00	
Bonds Authorized		$500,000.00
To record the authorized issue of 500 coupon bonds par $1000. Interest 7% payable February 15th and August 15th, see Board of Directors' resolution minute book, p. 56.		

This entry will place the issue of bonds on the books in the same manner as the opening entry for the corporation places the authorized issue of stock on the books.

The use of *Bonds Authorized* and *Unissued Bonds* accounts is advocated because not infrequently part of the issue will not be offered for sale; and, unless these accounts are used, the amount of bonds authorized and unissued may not be exhibited on the balance sheet.

Very frequently old established corporations have no trouble in " floating " their bonds and quite often a bank or investment house will buy the entire issue. The investment bankers may get the issue at par or below par, or under certain circumstances pay a slight premium. Premium and discount accounts will be discussed later. If the entire issue is sold outright for cash the only entry required is:

—2—

Cash	$500,000.00	
Unissued Bonds		$500,000.00
To record sale of entire issue to X Investment Bankers at par.		

Throughout this chapter the accounts used are purposely simplified. Long descriptive titles such as *First Mortgage Refunding Seven Per cent Bonds — Authorized,* as used in actual practice, are not essential to an understanding of the principles involved, and are therefore simplified as in the last two journal entries.

BONDS SOLD ON INSTALLMENTS

In many instances bonds will be sold on subscription very much as stock is sold, and for all practical purposes the accounting is the same. When bonds are sold, however, they are usually sold at a certain price plus accrued interest. This is because the purchaser will receive any interest which has accrued on the bond when he collects his first coupon or receives his first interest check if the bond is registered. The accrued interest is most conveniently calculated when the final payment is made and added to that. The bond is then turned over to the purchaser.

The journal entries on the following page will illustrate the sale by subscription of 100 coupon bonds, $1000. par, and 6% interest payable May 1st and November 1st. The subscriptions contract is executed May 31st and calls for a 50% down payment with the balance payable 60 days after date.

The student will note that the bondholder has paid $1500.00 in accrued interest. When he collects his first coupons November 1st, he will receive $3000.00 which represents the half year's interest on the bonds, which he may consider as a return of the $1500.00 he paid, plus an equal amount earned from July 30th to November 1st, the time he has held the bond. In actual practice the accrued interest must be calculated for each sale and added to the price paid for the bonds, unless, of course, they are bought on the interest date.

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May 31st		
Bond Subscriptions Receivable ...	$100,000.00	
Bonds Subscribed		$100,000.00
To record the receipt of a subscription for 100 bonds at $1000, plus accrued interest, 50% cash is received, balance due in 60 days.		
May 31st		
Cash	50,000.00	
Bond Subscriptions Receivable .		50,000.00
To record the receipt of 50% down payment on above subscription.		
July 30th		
Cash	51,500.00	
Bond Subscriptions Receivable .		50,000.00
Interest Accrued on Bonds		1,500.00
To record the receipt of final payment of $50,000.00 plus the accrued interest from May 1st to July 30th (90 days on $100,000 = $1,500).		
July 30th		
Bonds Subscribed	100,000.00	
Unissued Bonds		100,000.00
To record the issue of 100 bonds, serial numbers ......, etc., final payment received above.		

When the corporation pays the $3000 coupons to the purchaser, it will make the following entry:

November 1st		
Interest Accrued on Bonds	$1,500.00	
Bond Interest	1,500.00	
Cash		$3,000.00
For payment of bond interest.		

BOND PREMIUM AND DISCOUNT

It is not frequent that an issue of bonds can be disposed of at exactly their par value; more often they will be sold below or above par. When sold below par the difference is known as bond discount, while any amount received over par value is known as premium on bonds. There are many reasons for

bonds selling below and above their par or face value; sometimes it is the relative strength of the issuing corporation which will vary the price received for bonds offered for sale. The most important factor causing a variance in the sales price above or below par, however, is the value of money at the time of the issue. If money is worth six per cent and a corporation wishes to float an issue of five per cent bonds, everything else being equal, the bonds must sell at a discount, and similarly if money is worth only five per cent and a company floats an issue of six per cent bonds the issue will sell at a premium.

ACOUNTING FOR BOND PREMIUM

Suppose the Hawkins Manufacturing Company is issuing \$100,000. worth of 20-year bonds upon which 6% interest is to be paid January 1st and July 1st, and suppose the company is offered \$112,500. for the issue. The journal entries to record the sale will be as follows:

Cash	\$112,513.00	
6% Bonds Payable		\$100,000.00
Premium on Bonds		12,513.00
To record the sale of 100 6% bonds, coupons payable January 1st and July 1st at \$1125.13 each.		

When this entry is made, the *Premium on Bonds* account is set up with a credit balance. Each interest period, as the company pays the 3% interest on the \$100,000 worth of bonds, the following entries should be made:

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Bond Interest	\$ 3000.00	
Cash		\$ 3000.00
To record the payment of Coupon No. 1.		

Premium on Bonds	312.82	
Bond Interest		312.82
To write down bond interest by one-fortieth of the premium received on sale of bonds.		

If these entries are made at each interest period, the bond premium will be spread equally over the forty periods or twenty-year life of the bonds, thus reducing the actual interest paid for the use of the money to about 5%. This straight line method of apportioning the bond premium or discount is quite often followed in actual practice, but a more scientific calculation is sometimes made of the amortization of premium or discount on bonds. There are several books published giving bond tables, values, and yields at different costs for all regular types of bonds. It is therefore not ordinarily necessary for the accountant to compute any of these amounts any more than it is necessary or desirable for him to calculate interest as long as interest tables are available. It is essential, however, that every accountant understand how these values are calculated. The accounting student will get an introduction to the mathematics of accounting in Advanced Accounting for most second-year courses include some work in this very interesting field. There are also several good texts devoted to the mathematics of accounting and finance and many schools offer courses in this work. Those who wish to look ahead at this time may consult Sprague's *Extended Bond Tables*, or any standard text on the mathematics of accountancy.

ACCOUNTING FOR BOND DISCOUNT

Suppose the Hawkins Manufacturing Company plans to issue $100,000. worth of 20-year bonds as before, except that the interest rate is to be only four per cent. Investment bankers will not be willing to pay par, if money is worth five per cent; they will expect a discount. Suppose they pay $87,448.00 for the issue. The entries which the Hawkins Manufacturing Company should make are as follows:

Cash	$ 87,448.00	
Bond Discount	12,552.00	
4% Bonds Payable		$100,000.00
To record the sale of 100 4% bonds, coupons payable Jan. 1st and July 1st at $874.48 each.		

The bond discount will have exactly the opposite effect on the actual interest cost to what the premium on bonds account had.

It will tend to increase the interest cost and should be amortized as follows:

Bond Interest	$ 2000.00	
Cash		$ 2000.00
To record the payment of Coupon No. 1.		

Bond Interest	313.80	
Bond Discount		313.80
To write down the bond discount by one-fortieth and increase the interest cost.		

This treatment of the bond discount is the straight line method similar to that used in amortizing the bond premium in the first case.

Other accounts are met with in the treatment of bonds, such as the creating of sinking funds, but this and several other topics relating to both stocks and bonds more properly belong in the realm of advanced accounting.

One other account, however, which should be treated before this chapter is closed is the *Organization Expense* account.

ORGANIZATION EXPENSE

When a corporation is organized, certain definite and very necessary expenses must be met. Several, such as the cost of preliminary surveys, examinations and the like, must be paid, or payment guaranteed, before the corporation itself comes into legal existence. The men primarily interested in the formation of the corporation are jointly and severally liable for any such debts, and, should the charter not be granted, the organizers would have to pay all these expenses, without hope of reimbursement. Many other expenses will be required before the corporation can function as a well organized business. These will include the incorporation fee paid to the State, the legal fees, salaries and commissions paid to salesmen for obtaining subscriptions and selling the stock, and further for engraving the certificates, and purchase of an appropriate seal.

In short, all expenses necessary to the proper organization of the corporation may be charged to *Organization Expense.* This account, although given the definite title of "expense"

may properly and legally be carried as a deferred asset on the balance sheet, rather than be charged off to profit and loss as any ordinary expense would. Conservative accounting theory, while agreeing that this expense account may be properly listed as a deferred asset or as a deduction in the Net Worth Section, insists, nevertheless, that it must be written off against profits just as soon as it is possible, usually within a period of from three to five years. This write off taking place at a period subsequent to the incurring of the expense must be made against the Surplus account.

Thus, while the account *Organization Expense,* which very often represents a large amount, may be listed as a deferred asset, such listing should be temporary, and is permitted only because to charge this entire amount against the operations of the first accounting period would be rather unfair, when the benefits of sound organization are really shared in by all future periods.

QUESTIONS ON THE CHAPTER

1. (*a*) How is the *Minute Book* related to the books of record?
   (*b*) Explain its importance legally.

2. (*a*) Explain the form and operation of the *Stock Certificate Book.*
   (*b*) Describe a share of stock and tell some of the precautions taken to prevent its counterfeiting and overissue.

3. (*a*) Draw a diagram of a form you would advocate that a trust company use to record the number of shares held by each stockholder.
   (*b*) Explain the function and the operation of the columns used.

4. How does the trust company handle transfers of stock? Is the corporation interested in this operation? How does the trust company aid in this regard?

5. Differentiate between the "*Authorized*" and "*Unissued*" *Capital Stock* accounts.

6. Explain the make-up of the *Net Worth* section of a corporation balance sheet. Bring out the difference between *Capital Stock* and *Surplus.*

7. If the total assets of a corporation are not equal to the total liabilities plus the capital stock issued and outstanding, what will the difference represent?

8. The X Corporation has a surplus of $25,000.00 earned in the current year and an issue of common capital stock of $1,000,000. outstanding.

The Board of Directors have not declared any dividends for the past three years and now refuse to declare any dividends.

M, a stockholder, is dissatisfied and asks you if it is not possible for him to compel the corporation to declare a dividend.

Comment.

9. The T and E Corporation with $100,000. capital stock issued and outstanding has an earned surplus of $10,000. and wishes to declare a 6% dividend.

(*a*) Assume it has only $3600. available cash, but that $7000. in notes receivable will mature within 90 days. The company does not wish to delay the payment of the dividend more than thirty days. What would you suggest?

(*b*) Assume the same facts but that the company has $20,000. worth of treasury stock and wishes to pay the 6% dividend in stock. Explain the procedure. Are the stockholders any better off? Suppose the shares are listed on the stock exchange and, before the stock dividend was declared, were selling at $102.00 per share. What will the effect of the dividend have on the market price of the shares?

10. The Cronk Manufacturing Company, Inc., has an earned surplus of $25,000. It has $100,000. in $100. par common stock and $100,000. in 6% cumulative preferred stock.

(*a*) It has not paid dividends to either class of stockholders for the past two years. The Board of Directors now feel safe in declaring a dividend to both classes of stock. What is the amount which (at the end of three years) the company must now pay to the preferred shareholders?

(*b*) How much is available for the common stockholders?

11. Presume the same facts as in Question 9. The Board of Directors feel it unwise to pay any dividends at the present time.

(*a*) What can the preferred stockholders do about it?

(*b*) Would your answer be the same if the preferred stock were non-cumulative?

12. Presume the Cronk Manufacturing Company, Inc., has the same amounts of stock as before, $100,000. each of common and preferred. The preferred is 6%, and the company makes net profits as follows: end of the first year, $5000.00; end of the second year, $10,000.00; end of the third year, $15,000.00. What is the largest dividend possible for each class of stock, presuming the preferred stock is:

(*a*) Non-cumulative and non-participating.

(*b*) Cumulative and non-participating.

(*c*) Cumulative and participating equally with common after each class shall have received 6%.

13. What do you understand by a corporation bond?

(*a*) Definition.

(*b*) How may bonds be classified?

14. Name and describe three different forms of bonds.

15. (*a*) Why may bonds sell at a premium?
    (*b*) Why may bonds sell at a discount?
16. (*a*) How may bond premiums be amortized?
    (*b*) How may bond discount be amortized?
17. Explain the function of the *Organization Expense* account.

PROBLEM MATERIAL

Problem 1

The H. Dover Co., Inc., had a balance in Surplus at December 31, 1939, of $42,712.60.

On April 15 the Company paid an income tax claim affecting the last two years for a sum of $1250.00.

May 15 the Company disposed of a piece of Real Estate for $3500.00, which was carried on the books at $1000.00.

November 15 the Company had to trade an old truck toward a new truck for $500.00, which was carried on the books at $750.00 net of accrued depreciation to date of turn in.

November 30 the Company paid dividends of $12,000.00.

You are a public accountant and have been engaged by the Dover Co. to audit their books and prepare proper financial statements. The bookkeeper explains that he has closed all accounts as best he could, leaving a credit balance in the Profit and Loss Summary Account indicating a net profit of $14,720.80. He explains that he was not certain regarding the listed transactions above and wishes to review the following treatment:

1. April 15 — he debated an account called " Tax Loss," which he closed to Profit and Loss Summary.
2. The May 15 Real Estate gain was closed to Profit and Loss Summary.
3. The Nov. 15 entries were all handled correctly except that the $250,000 loss on trade of autos was closed to the Profit and Loss Summary as a current loss.
4. A Dividends Account was still open with a debit of $12,000.00, the result of the following journal entries:

Dividends	$12,000.00	
Dividends Payable		$12,000.00
6% dividend declared on C. S.		
Dividends Payable	$12,000.00	
Cash		$12,000.00
To record payment of dividends.		

In addition to the facts above your audit of the Dec. 31 Inventory indicates that it was overstated by $360.00.

Required:

(1) All journal entries to correct the foregoing, and close the final correct profit to surplus.

(2) Open the *Profit and Loss Summary* account with the bookkeeper's balance and post the correction entries, and the entry to close the correct profit to surplus.

(3) Open a *Surplus* account with the 1939 balance, post any entries affecting and balance at December 31, 1940.

(4) Prepare a *Statement of Surplus* as of December 31, 1940.

PROBLEM 2

The Goodwin Corporation plans to issue $200,000.00 of 20-year first mortgage coupon bonds, interest payable semi-annually April 1st and October 1st.

An Underwriter offers the Corporation $196,000.00 for the issue if the Company will issue the bonds as 5% bonds, or will pay $232,-000.00 for the issue if the Company will issue 6% bonds.

Required:

(1) Which is the better offer for the corporation? Explain the calculations for Offer No. 1 and Offer No. 2, using the straight line method for the amortization of bond discount and bond premium.

(2) Assume the bonds are to be issued April 1st, at the more attractive offer. Give journal entries for (1) Authorization of the issue, (2) Sale to underwriters, (3) Payment of first coupons including the amortization of the premium or discount.

PROBLEM 3

Assume that Franklin and Marshall are partners, sharing profits and losses equally, and their balance sheet at December 31 is as follows:

FRANKLIN AND MARSHALL

Balance Sheet, December 31, 19—

Assets		*Liabilities and Net Worth*	
Cash	$ 6,500.00	*Liabilities*	
Notes Receivable	3,000.00	Accounts Payable	$ 6,000.00
Accounts Receivable	14,000.00	Notes Payable	1,000.00
Inventory	20,000.00		
Sundry Assets	1,500.00	*Net Worth*	
		J. Franklin Capital	20,000.00
		F. Marshall Capital	18,000.00
	$45,000.00		$45,000.00

They decide to incorporate as Franklin-Marshall Inc., with a total capital of $200,000.00 divided into 2000 shares of common stock par

value \$100.00. In anticipation of later selling stock to others they decide to add Good-will to the books, calculated to be worth \$10,000.00, before the Corporation is formed.

In the application for Charter Mr. J. Franklin subscribed for three shares, Mr. F. Marshall five shares, and Mr. J. Franklin, Jr., two shares.

January 15.

The approved charter was received, and certified checks were paid in by the three original subscribers, as full payment at par for their shares.

January 16.

A check for \$300.00 is drawn to T. Lynch, an attorney, for legal services and fees in organizing the Corporation.

January 20.

The Board of Directors pass a resolution authorizing the purchase of the business conducted by Mr. Franklin and Mr. Marshall in partnership. The former partners agree to accept shares of capital stock at par for their equities in the partnership.

Required:

(1) The journal entry to place Good-will on the partnership books.
(2) Entries required for the organization of the corporation, sale of stock to the original incorporators, payment of organization costs.
(3) Entries required for taking over the assets of the partnership and liabilities assumed in the purchase of the partnership business. New books are to be opened by the corporation.
(4) A balance sheet for the corporation after all Journal entries have been posted.

PROBLEM 4

March 1.

Assume Franklin-Marshall Inc. have offered their stock to the public for subscription at par on the following terms: 10% cash with contract, balance 30% April 1, 30% May 1, and the final 30% June 1, and have this day accepted subscription to 500 shares.

March 15.

J. Franklin and F. Marshall each donate 50 shares of their stock to be held in the Treasury and later sold to buy a plant site for a factory building soon to be erected.

April 1.

First stock installment received in full.

April 15.

The corporation sells 100 shares of the donated stock to K. Williams at \$80.00 per share.

The corporation buys a five-acre tract of land from the Newman Developing Co. for \$8000.00.

May 1.

The corporation has just completed negotiations with the Baltimore Finance Co. to float a $100,000.00 bond issue. The Bonds are drawn as $4\frac{1}{2}\%$ coupon bonds with interest payable May 1st and November 1st. The bonds are given to the Baltimore Finance Co. and their check for $96,000.00 is received.

The second installment on stock subscriptions are received in full.

May 5.

The American Bank Note Company's $75.00 invoice for printing bonds is approved and paid.

May 8.

A bill from T. Lynch for legal services in effecting loan from the Baltimore Finance Co. is approved and paid $150.00.

June 1.

The final installment is received from all subscribers and their certificates issued.

Required:

(1) All journal entries required for the facts above.
(2) Balance sheet after all the foregoing entries have been posted.

CHAPTER XVIII

THE THEORY OF CORPORATIONS APPLIED

The purpose of this chapter is to present a problem involving as many factors as possible in the organization and operation of a corporation. The complete solution of the problem will then be given, including all Journal entries and accounts required, together with a Trial Balance of the Ledger and a Balance Sheet.

This is done in order to unify, and to impress upon the student, some of the more important theories of corporations touched upon in the two previous chapters.

In carrying out this purpose let us suppose that Mr. Emerson and Mr. Martin, who have been conducting an office supply business as partners, plan to expand the business and manufacture a check-protecting device, which Mr. Emerson has patented. They wish to incorporate, and they interest Mr. Thomas, an attorney, who consents to aid them in the organization and also put some money into the enterprise.

The new firm is to be known as the E. M. Office Supply Company and is organized under the laws of the State of New York. It is chartered October 1st, to issue 2000 shares of common stock and 2000 shares of 6% preferred stock, each with a par value of $100.00.

Mr. Emerson subscribes to 300 shares, Mr. Martin subscribes to 300 shares, and Mr. Thomas subscribes to 100 shares of the common stock; all subscriptions are at par, and checks in the proper amounts are received with each subscription.

October 2. — The first meeting of the stockholders is called and Mr. Thomas, Mr. Emerson, and Mr. Martin are elected to the Board of Directors. Mr. Emerson is elected to the office of President and General Manager, Mr. Martin, Vice-President in charge of Sales; while Mr. Thomas is to act as Treasurer, and legal adviser to the corporation.

At this meeting it is voted that the following debts be paid:

1. To Russell Bank Note Company $300.00 for engraving stock certificates and furnishing other miscellaneous supplies.
2. To the F. Audit Company for accounting services, clos-

ing the partnership books and opening the corporation records, $500.00.

3. To Mr. Thomas, $1200.00 for fees paid to the State for charter and other organization expenses. Mr. Thomas agrees to accept twelve shares of common stock for this debt.

At the same meeting it is also agreed that the business operated by Emerson and Martin be taken over. The balance sheet certified to by the F. Audit Company exhibited below is to be used as the basis of the purchase. Mr. Emerson and Mr. Martin both agree to accept common stock at par for their equities in the partnership.

EMERSON AND MARTIN

Balance Sheet, September 30, 19—

Assets		*Liabilities*	
Cash	$ 3,642.00	Notes Payable	$ 8,000.00
Accounts Receivable	19,824.00	Accounts Payable	12,106.00
Inventory Furniture (cost)	24,200.00		
Inventory Supplies (cost)	3,640.00	*Net Worth*	
Delivery Equipment		Mr. Emerson, Capital	18,000.00
(cost less depreciation)	720.00	Mr. Martin, Capital	14,000.00
Insurance Unexpired	80.00		
	$52,106.00		$52,106.00

The transfer is accomplished and the new books opened.

October 3. — The Board of Directors agree to offer their common stock for sale and to engage Mr. Field, a stock salesman, to solicit subscriptions from a selected list of friends of the corporation. Mr. Field is to get no salary but will receive three per cent of all subscriptions he secures. The subscriptions are to be at par, payable 20% with the subscription and the balance in four monthly installments, November 15, December 15, January 15, and February 15, respectively.

October 6. — The Board of Directors by resolution agree to purchase the patent rights for the manufacture of the check protector from Mr. Emerson. The agreed price is $50,000.00, payable in preferred stock at par plus one dollar in cash for each check protector sold. Mr. Emerson agrees and turns over the patent rights to the corporation. Mr. Thomas bills the corporation $50.00 for legal services in effecting the transfer, and is paid in cash. Five hundred shares of the preferred stock are issued to Mr. Emerson in full payment.

October 10. — Mr. Emerson donates back to the corporation 200 shares of the preferred stock to be held in the treasury, and sold later to provide a fund to advertise the check protector.

October 15. — Mr. Field has completed his canvass of the list furnished him and submits the following subscription list:

W. Boyd	20 shares	B. Potter	25 shares
B. Smith	20 shares	S. Mitchell	25 shares
C. Haven	10 shares	T. Chellis	50 shares
R. Booth	50 shares		

together with checks for the proper down payments in each case.

The Board of Directors agree to discontinue the canvass for subscriptions and pay Mr. Field $600.00 in cash for his services.

October 30. — The Board of Directors have agreed to offer an issue of 6% bonds to the public to secure funds with which they are to erect and equip a building for the manufacture of the check protector. They authorize an issue of 1000 6%, 20-year bonds of $100.00 denomination, with coupons payable November 15 and May 15 of each year, to be secured by a mortgage on the building when erected.

Mr. Thomas arranges with the Philadelphia Investment Company to take the entire issue at $96.00 each, payable November 15 when the bonds are to be issued.

November 5. — Call No. 1 is sent out to all subscribers.

November 15. — The Russell Bank Note Company delivers the 1000 bonds with their bill for services in amount of $50.00, which is paid in cash. The bonds are delivered to the investment banker and his check for $96,000.00 is received. The second installment is received.

November 18. — The board of Directors vote to sell 100 shares of the treasury stock preferred to A. Johnson at $98.00 per share, and place the cash in a special fund to be used to defray the advertising campaign about to be started. The sale is consummated and Mr. Johnson's check for $9800.00 is received and the stock issued to him.

October

–1–

Unissued Common Capital Stock	$200,000.00	
Authorized Common Stock		$200,000.00
Unissued Capital Stock, 6% Preferred .	200,000.00	
Authorized Capital Stock, 6% Pref'd.		200,000.00

To record the authorized issue of 2000 shares of common stock, par value \$100.00, and 2000 shares of 6% Preferred stock, par value \$100.00.		
Cash	\$ 70,000.00	
Unissued Common Capital Stock ...		\$ 70,000.00
To record the subscription and issue of 300 shares of common to Mr. Emerson; 300 shares of common to Mr. Martin, and 100 shares to Mr. Thomas, all at par, and paid by check.		
—2—		
Organization Expense	2,000.00	
Cash		800.00
Unissued Common Capital Stock ...		1,200.00
To record the payment of organization expenses as follows:		
Russell Bank Note Co. .. \$ 300.00		
F. Audit Co. 500.00		
M. Thomas 12 shares C. S. 1,200.00		
Cash	3,642.00	
Accounts Receivable	19,824.00	
Inventory of Furniture	24,200.00	
Inventory of Supplies	3,640.00	
Delivery Equipment	720.00	
Insurance Unexpired	80.00	
Notes Payable		8,000.00
Accounts Payable		12,106.00
Mr. Emerson		18,000.00
Mr. Martin		14,000.00
To record the acquisition of assets and liabilities of the Emerson and Martin partnership purchased as per resolution of Board of Directors (see Minute Book), and to credit the net value to Mr. Martin and Mr. Emerson as above.		
Mr. Emerson	18,000.00	
Mr. Martin	14,000.00	
Unissued Common Capital Stock ...		32,000.00
To record payment of equities incurred in purchase of business of Emerson and Martin. See resolution of Board of Directors and entry above.		

–6–

Patent Rights	$ 50,000.00	
Unissued 6% Preferred Capital Stock		$ 50,000.00
To record the purchase of the patent rights for the manufacture of the check protector from Mr. Emerson, payable in 500 shares of 6% preferred stock. See resolution in Minute Book.		
Organization Expense	50.00	
Cash		50.00
To record the payment of $50 to Mr. Thomas, for legal services in effecting the transfer of patent rights on check protector.		
–10–		
Treasury Stock Preferred	20,000.00	
Surplus for Advertising		20,000.00
To record receipt of 200 shares of 6% preferred stock from Mr. Emerson, donated by him to create a fund for advertising the check protector.		
–15–		
Subscriptions Contracts Receivable ...	20,000.00	
Common Capital Stock Subscribed ..		20,000.00
To record the subscriptions of 200 shares of Common Capital Stock received this day as follows: W. Boyd .... 20 shares B. Smith .... 20 shares C. Havens .... 10 shares R. Booth .... 50 shares B. Potter .... 25 shares S. Mitchell .... 25 shares T. Chellis .... 50 shares		
Cash	4,000.00	
Subscriptions Contracts Receivable .		4,000.00
To record the 20% down payment received with above subscriptions.		
Organization Expense	600.00	
Cash		600.00
To record payment of 3% commission to Mr. Field for $20,000. subscriptions received by him and recorded this day.		

–30–		
Unissued Bonds 20 years 6%	$100,000.00	
20-year 6% First Mortgage Bonds ..		$100,000.00
To record an authorized issue of 1000 20-year, 6% First Mortgage Bonds, par value $100, coupons payable November 15 and May 15 of each year. To be sold and proceeds to erect and equip a building for the manufacture of the check protector.		
NOVEMBER		
–15–		
Cash	96,000.00	
Bond Discount	4,000.00	
Unissued Bonds, 20-year, 6%		100,000.00
To record the sale of above bonds at $96.00 to the Philadelphia Investment Company, delivered this day. Certified check in amount of $96,000.00 received and deposited.		
–15–		
Organization Expense	50.00	
Cash		50.00
To record payment of invoice to Russell Bank Note Company for printing and engraving of bonds.		
Cash	4,000.00	
Subscriptions Contracts Receivable .		4,000.00
To record the receipt of $4,000 in cash from subscribers' second installment due this day.		
–18–		
Cash Advertising Fund	9,800.00	
Surplus for Advertising	200.00	
Treasury Stock Preferred		10,000.00
To record the sale of 100 shares of treasury stock. Cash to be used to defray costs of advertising; deposited in special account.		

Unissued Common Capital Stock

Oct.	1	To record authorized issue of common stock, 2,000 shares, par $100	$200,000.00	Oct.	1	To record the issue of 700 shares — to original subscribers	$70,000.00
					1	To record issue to Mr. Thomas payment on fees, etc., Organization Expenses	1,200.00
					2	Issue to Emerson & Martin for partnership equities	32,000.00

Authorized Common Capital Stock

				Oct.	1	To record authorized issue of common stock, 2,000 shares, par $100	$200,000.00

Unissued C.S. 6% Preferred

Oct.	1	To record authorized issue of preferred stock 2,000 shares par $100	$200,000.00	Oct.	6	To record issue of 500 shares to Mr. Emerson for patent rights	$50,000.00

Authorized C.S. 6% Preferred

				Oct.	1	To record authorized issue of preferred, 2,000 shares, par $100	$200,000.00

Cash

Oct.	1	Rec'd. from original subscribers	$70,000.00	Oct.	1	Check Nos. 1 and 2, payment of organization expense	$800.00
Oct.	2	Transfer of cash from partnership	3,642.00	Oct.	6	Legal fees to Mr. Thomas for transfer of patent rights	50.00
Oct.	15	To record receipt of 20% down payment on stock subscriptions	4,000.00	Oct.	15	To Mr. Field 3% commission on $20,000.00 subscriptions	600.00
Nov.	15	To record check received from sale of bonds	96,000.00	Nov.	15	For printing of 1,000 bonds	50.00
Nov.	15	Records 2nd installment on subscriptions	4,000.00				

ORGANIZATION EXPENSE

Oct.	1	To record payment of organization expense; $300 Russell Bank Note; $500 F. Audit Co.; $1200 stock to Mr. Thomas	$2,000.00				
Oct.	6	For legal fees in transfer of patent rights	50.00				
Oct.	15	For 3% commission on $20,000 subscriptions	600.00				
Nov.	15	For printing of bonds	50.00				

ACCOUNTS RECEIVABLE

Oct.	2	Balance from partnership	$19,824.00				

INVENTORY OF FURNITURE

Oct.	2	Balance from partnership	$24,200.00				

INVENTORY OF SUPPLIES

Oct.	2	Balance from partnership	$ 3,640.00				

DELIVERY EQUIPMENT

Oct.	2	Balance from partnership	$ 720.00				

FIRE INSURANCE UNEXPIRED

Oct.	2	Balance from partnership	$ 80.00				

NOTES PAYABLE

				Oct.	2	Balance from partnership	$ 8,000.00

ACCOUNTS PAYABLE

				Oct.	2	Balance from partnership	$12,106.00

MR. EMERSON

Oct.	2	To record payment by issue of 180 shares of common stock	$18,000.00	Oct.	2	For equity in partnership	$18,000.00

MR. MARTIN

Oct.	2	To record payment by issue of 140 shares of common stock	$14,000.00	Oct.	2	For equity in partnership	$14,000.00

PATENT RIGHTS

Oct.	6	Issue of 500 shares of 6% preferred payment of patent rights to check protector	$50,000.00				

TREASURY STOCK PREFERRED

Oct.	10	To record donation of 200 shrs. pref'd from Mr. Emerson	$20,000.00	Nov.	18	Sale of 100 shares	$10,000.00

SURPLUS FOR ADVERTISING

Nov.	18	Discount on sale of 100 shares	$200.00	Oct.	10	To record the donation of 200 shares preferred to hold for advertising fund	$20,000.00

SUBSCRIPTIONS CONTRACTS RECEIVABLE

Oct.	15	To record subscription to 200 shares	$20,000.00	Oct.	15	20% cash payment	$ 4,000.00
				Nov.	15	2nd payment	4,000.00

COMMON CAPITAL STOCK SUBSCRIBED

				Oct.	15	To record the subscription to 200 shares	$20,000.00

UNISSUED BONDS, 20 YEARS, 6%

Oct. 30	To record issue of 1,000, 20-year, 6% Coupon, Nov. 15 and May 15	$100,000.00	Nov. 15	To record sale to Philadelphia Investment Co.	$100,000.00

TWENTY-YEAR, 6% FIRST MORTGAGE BONDS

			Oct. 30	To record the issue of 1,000 bonds par $100, 20-year Coupon, 6% May & Nov. 15	$100,000.00

BOND DISCOUNT

Nov. 15		$4,000.00			

CASH ADVERTISING FUND

Nov. 18	For sale of donated preferred stock	$9,800.00			

THE E. M. CORPORATION TRIAL BALANCE

Unissued Common Capital Stock	$ 96,800.00	
Authorized Common Capital Stock		$200,000.00
Unissued C. S. 6% Preferred	150,000.00	
Authorized C. S. 6% Preferred		200,000.00
Cash	176,142.00	
Organization Expense	2,700.00	
Accounts Receivable	19,824.00	
Inventory of Furniture	24,200.00	
Inventory of Supplies	3,640.00	
Delivery Equipment	720.00	
Fire Insurance Unexpired	80.00	
Notes Payable		8,000.00
Accounts Payable		12,106.00
Patent Rights	50,000.00	
Treasury Stock Preferred	10,000.00	
Surplus for Advertising		19,800.00
Subscriptions Contracts Receivable	12,000.00	
Common C. S. Subscribed		20,000.00
Twenty-year 6% First Mortgage Bonds		100,000.00
Bond Discount	4,000.00	
Cash Advertising Fund	9,800.00	
	$559,906.00	$559,906.00

The trial balance above was taken to prove the general ledger in balance and to serve as a basis for the preparation of a balance sheet which is exhibited on the following page.

The student may have noticed that no routine business transactions were included in the problem. Purchases and sales of merchandise and other usual transactions of a going concern were purposely omitted. The problem may therefore seem to lack practicality, but no apologies are offered because, as was said before, our principal purpose is merely to illustrate in an example some of the transactions peculiar to the corporation.

E. AND M. BALANCE SHEET AS OF NOVEMBER 18, 19—

ASSETS

Current Assets:		
Cash — General Fund	$176,142.00	
Cash — Advertising Fund	9,800.00	
Treasury Stock Preferred	10,000.00	
Subscriptions Contracts Receivable	12,000.00	
Accounts Receivable	19,824.00	
Total Current Assets		$227,766.00
Fixed Assets:		
Inventory of Furniture	24,200.00	
Inventory of Supplies	3,640.00	
Delivery Equipment	720.00	
Patent Rights	50,000.00	
Total Fixed Assets		78,560.00
Deferred Charges:		
Insurance Unexpired	80.00	
Bond Discount	4,000.00	
Organization Expense	2,700.00	
Total Deferred Charges		6,780.00
Total Assets		$313,106.00

LIABILITIES AND CAPITAL

Liabilities

Current Liabilities:		
Notes Payable	$ 8,000.00	
Accounts Payable	12,106.00	
Common C. S. Subscribed	20,000.00	
Total Current Liabilities	$ 40,106.00	
Fixed Liabilities:		
20-year 6% First Mortgage Bonds	100,000.00	
Total Liabilities		$140,106.00

Net Worth

Common Stock:				
Authorized	$200,000.00			
Less Unissued ..	96,800.00			
Issued and Outstanding		103,200.00		
6% Preferred Stock:				
Authorized	200,000.00			
Less Unissued ..	150,000.00			
Issued and Outstanding		50,000.00		
Total Capital Stock Outstanding			$153,200.00	
Surplus for Advertising			19,800.00	
Total Capital and Surplus ..				$173,000.00
Total Liabilities and Net Worth				$313,106.00

PROBLEM MATERIAL

Problem 1

Mr. E. Johnson, L. Lamont, and C. Davis, who are graduate pharmacists, own and operate three independent drug stores in Newark, N. J. They decide to organize a Corporation to be known as the Consolidated Drug Stores Inc. which shall have as its principal purpose the immediate taking over and operation of the three independent stores, and to gradually build up a chain; also to manufacture certain staple and patent medicines. They seek the advice and counsel of Mr. H. Thomas, an attorney, who files an application for a charter with the State of New Jersey, requesting the right to issue $1,000,000 worth of Common Capital Stock and $1,000,000 worth of 6% preferred Capital Stock, all shares having a par value of $100.00. The three original incorporators each subscribe to twenty shares of common capital stock, certified checks to be paid the corporation as soon as the Charter is received.

November 1.

An approved charter in the name of " Consolidated Drug Stores Inc." is received from the State of New Jersey approving the issuance of stock as requested. Messrs. Johnson, Lamont and Davis pay in their checks and take their stock certificates each for twenty shares. With the aid of Attorney Thomas they organize the corporation, each

of the three stockholders are elected to the Board of Directors and Mr. Johnson is voted President and General Manager, Mr. Lamont Vice President to be in charge of manufacturing, while Mr. Davis is also a Vice President and to act as Treasurer. Mr. Thomas is to act as Legal Adviser of the Corporation. Mr. Thomas advanced all fees and costs in obtaining the charter and by proper resolution his bill for $1,500.00 is approved for immediate payment, he is to receive $500.00 in cash and ten shares of the preferred stock.

November 2.

The Board of Directors by proper resolution approve the following Balance Sheets and agree to purchase each of the three drug stores to be the original units of the contemplated chain. Each Proprietor agrees to accept shares of the Common Capital Stock for their equities and the assets and liabilities are accordingly taken over and stock issued to consummate the agreement approved by the above mentioned resolution of the Board of Directors.

Balance Sheet as of Nov. 1	*Johnson*	*Lamont*	*Davis*
Assets			
Inventory	$ 8,000.00	$ 7,500.00	$ 6,000.00
Fixtures and Equipment	12,000.00	10,000.00	8,000.00
Land and Buildings	15,000.00		
Goodwill	10,000.00	10,000,00	10,000.00
Total Assets	45,000.00	27,500.00	24,000.00
Liabilities			
Accounts Payable	$ 2,500.00	$ 2,500.00	$ 3,000.00
Notes Payable	2,000.00		1,000.00
Mortgage Payable	7,500.00		
Total Liabilities	12,000.00	2,500.00	4,000.00
Net Worth			
Capital Accounts	33,000.00	25,000.00	20,000.00
Total Liabilities and Net Worth	$45,000.00	$27,500.00	$24,000.00

November 5.

Mr. Johnson, Mr. Lamont and Mr. Davis each donate back to the Corporation 100 shares of Common Capital Stock to be held in the treasury, and when sold the proceeds are to be used for the purchase of a manufacturing chemist's business.

November 7.

The 300 donated shares are sold to Mr. A. Wilson for $24,000.00 cash.

November 10.

The Corporation by proper resolution of the Board of Directors authorizes the officers to purchase the going business of the "United Chemists," a partnership owned and operated under this registered trade name by Mr. J. Hughes and Mr. C. Ray, as indicated by the certified Balance Sheet below. The Corporation is to take over all

Assets at their book value and to assume the Mortgage. Mr. Hughes and Mr. Ray each agree to accept payment one fourth in cash and the balance in preferred shares of capital stock of the Corporation.

UNITED CHEMISTS

Balance Sheet as of Nov. 10, 194–

Assets		*Liabilities*	
Land and Buildings ..	$42,000.00	Mortgage Payable ...	$25,000.00
Laboratory Equipment	20,000.00		
Inventory	16,000.00		
Delivery Equipment .	2,000.00	*Net Worth:*	
Trade Name and Good-		J. Hughes	40,000.00
Will	5,000.00	C. Ray	20,000.00
	$85,000.00		$85,000.00

November 15.

The Corporation by proper resolution of the Board of Directors propose to purchase a five acre site adjoining the United Chemists to be used for the erection of a new building. The price is $15,000.00 and payable $10,000.00 in cash and $5,000.00 in the Corporation's preferred stock. The General Realty Co. accept the offer and the transfer is completed.

November 18.

The officers of the Corporation have agreed to offer an issue of 4% bonds, the proceeds of which are to be used to build and equip a new manufacturing plant and laboratory. The Board of Directors therefore by proper resolution authorize an issue of 200 one thousand dollar thirty year 4% bonds with coupons payable November 30 and May 30 of each year. The Maxwell Finance Co. agree to purchase the entire issue for $194,000.00. The bonds are to be printed and delivered by November 25.

November 24.

The bonds are received from the American Bank Note Company with a bill for $200.00 for printing and engraving the bonds. The bill is paid by check.

November 25.

The bonds are turned over to the Maxwell Finance Co. and their certified check for $194,000.00 is received.

November 27.

A bill for $150.00 from Mr. Thomas for legal services in approving the bond issue is paid in cash.

December 1.

Mr. T. Howard, a stock salesman, is engaged to solicit subscriptions for the Corporation's preferred stock, from a selected list of friends of the officers of the Corporation. The subscriptions are to be at par payable one third on or before Jan. 1 when the stock is to be issued, the balance in two equal installments Feb. 1 and March 1.

December 15.

Mr. Howard has completed his canvass and submits the following subscriptions list:

J. Long	10 shares	check for	$ 333.34
T. Barrow	15 shares	" "	500.00
M. Shaw	20 shares	" "	666.67
L. Lewis	30 shares	" "	1,000.00
W. Newton	25 shares	" "	833.34
T. Powers	60 shares	" "	2,000.00

The Board of Directors agree to discontinue the canvass for subscriptions and pay Mr. Howard $480.00 for his services.

Required:

1. Write journal entries to give expression to all the above transactions and happenings. Use the date and a brief explanation with each entry.
2. Open Ledger accounts and post all the journal entries.
3. Take a Trial Balance.
4. Prepare a Balance Sheet.

CHAPTER XIX

DEPARTMENTAL ACCOUNTING AND COLUMNAR JOURNALS

WHY A DEPARTMENTALIZED BUSINESS

Department stores, of course, recognize the value of departmental records and reports. They have been keeping their records by departments for years. Their accounting set-up is the last word in accounting efficiency. It is not the purpose of this chapter, however, even to try to explain the operation of a modern set of books and records as maintained by a large department store, but rather to point out some of the advantages of departmental accounting and show how this type of accounting might be used to advantage by a moderate-sized business and even by a small business.

Many businesses are operated as single enterprises, so far as their accounting records are concerned, when their business is, in fact, being operated on a departmental basis.

A good example might be the modern drug store. Some stores have already been introduced to the value of departmental records and know their income and expenses by departments. They have divided their business into departments such as (1) Prescriptions, (2) Patent Medicines, (3) Perfumes and Cosmetics, (4) General Merchandise, (5) Soda Fountain, (6) Cigars, Cigarettes, and Candies, (7) Lending Library. They know the gross profits by departments and know their most profitable and their least profitable departments. Others continue to operate, so far as records are concerned, more or less as a single-unit business with no breakdown of sales or gross profits by departments. These stores know the net result of their operations, a gain or a loss, but as to the relative value of the several departments, they have nothing factual to guide them.

Another such group of stores are the Furniture stores, which might, for example, maintain departments for: (1) Living Room Furniture, (2) Dining Room Furniture, (3) Bed Room Furniture, (4) Radios, (5) Washing Machines, (6) Refrigerators, and so forth.

The so-called super markets are usually divided into at least three major departments or divisions: (1) Groceries, (2) Fruits and Vegetables, (3) Meats. The dealers in gasoline, oil, tires, tubes, and accessories might keep their records by departments. All of these groups would probably benefit if their records were departmentalized to the extent, at least, that their owners would know the relative importance of the several departments. If such information were available, the operator would know which products or departments should be promoted, expanded, and built up, and, at the same time, which departments might be curtailed, changed, or possibly eliminated.

INTRODUCTION TO DEPARTMENTAL RECORDS

When it has been decided to install a new system of records on a departmental basis, one of the first things to be decided should be the extent of the breakdown by departments. Whatever decision is finally arrived at, the *Purchases, Sales, Purchases Returns, Sales Returns,* and *Inventory* accounts will have to be kept separately. No longer will one Purchases account or one Sales account be sufficient, but rather one Purchases account will have to be maintained for each department. If a new system were contemplated for a drug store, for example, it would be necessary to set up one account for the purchase of drugs or chemicals which might be charged to *Prescriptions or Pharmacy Department Purchases.* Purchases of patent medicines might be charged to *Purchases of Patent Medicines* account. The important point to note is that whatever breakdown is decided for purchases, the same classification must be made for Sales, Purchases Returns, Sales Returns, and Inventories. All of this is necessary so that the accountant may be able to determine at least gross profits by departments.

In this chapter we shall not try to use any particular business as a model, but rather try to illustrate some fundamental forms which might be used, expanded, or changed to meet the needs of a particular business. In this respect we shall simply designate the several departments by letter, as A, B, C, and the number of departments in most instances will be limited to three, realizing that the principles learned from the operation of a three-department business would be the same when applied to a business requiring many more departments.

PURCHASES BY DEPARTMENTS

Purchases will originate as always through the issuance of a purchase order, and the subsequent receipt of an invoice which, in turn, will be audited and approved for payment. None of the foregoing procedure will be affected in the least by the installation of separate departmental purchase accounts. Frequently, however, one invoice may list materials or merchandise which must be charged to two or more departments. When this is true, it will be necessary for someone acquainted with the classification of accounts to indicate how the separate items should be charged.

DEPARTMENTAL PURCHASE BOOK

A purchase book, such as the one illustrated, could be used very satisfactorily by any business requiring three departments. The use and operation of the book, as before mentioned, could very easily be expanded to accommodate any number of departments. The operation of this book, which is to be explained immediately, would be fundamentally the same regardless of the number of departments involved.

PURCHASES FOR MONTH OF December 194

DATE	ACCOUNT CREDIT	PURCHASE ORDER #	F	CREDIT	DEBIT		
				ACCTS. PAYABLE	DEPT. A	DEPT. B	DEPT. C
Dec 2	T. Walsh Co.	BX121	11	720 00			720 00
3	F. Marsh Inc.	BX122	12	860 00	360 00	500 00	
5	Harrison Supply Co.	BX123	13	1289 00	615 00	294 00	380 00
9	F. Marsh Inc.	BX124	12	750 00	410 00	340 00	
14	T. Walsh & Co.	BX125	11	117 00			117 00
16	Harrison Supply Co.	BX126	13	961 00	455 00	386 00	120 00
18	F. Marsh Inc.	BX127	12	810 00	490 00	320 00	
21	Harrison Supply Co.	BX128	13	1460 00	595 00	624 00	241 00
23	F. Marsh Inc.	BX129	12	800 00	440 00	360 00	
30	T. Walsh & Co.	BX130	11	118 00			118 00
	: Accounts Payable Control Cr.		25	7885 00			
	Purchases Dept. A	Dr.	89		3365 00		
	Purchases Dept. B.	Dr.	90			2824 00	
	Purchases Dept. C.	Dr.	91				1696 00

The column at the extreme left is the usual date column. The next column, headed *Account Credit,* is provided for the name of the account to be credited in the subsidiary accounts payable ledger. The following space is provided for some brief explanation of the purchase; this may be simply the purchase order number which refers to the primary document filed for convenient reference, or, where vouchers are used in a voucher system, simply the voucher number is recorded. The next narrow column is the usual folio column and is provided for the page set aside for each account in the Accounts Payable Ledger. The continued use of controlling accounts and subsidiary ledgers is presumed in this chapter. The first money column is provided for the total amount to be credited to the individual accounts kept in the Accounts Payable Ledger. Posting from this column is usually done from day to day. The next three money columns are provided for the analysis of the purchase by departments. The amounts written in these three columns are to be posted only in total at the end of the accounting period, usually each month, to the debit of the three separate purchases accounts kept in the General Ledger. In addition to posting the three purchases accounts at the end of the month as just indicated, it will be necessary to post the total of the *Accounts Payable Controlling* account. This posting to the General Ledger controls the separate postings made to the individual accounts kept in the subsidiary Accounts Payable Ledger made from day to day, as indicated above.

DEPARTMENTAL SALES BOOK

A sales book such as the one illustrated could be used very satisfactorily also by a business organized on a three-department basis; and, as was said with reference to the Purchase Book, the form could very easily be expanded to accommodate any number of departments.

The usual date column is provided at the extreme left. The next space is provided for the account to be debited. The following space is provided for some brief explanation of the sale, the invoice numbers for the sales made to customers on account or the words cash sales will be satisfactory. The folio column is used for recording the page set aside for each customer in the Accounts Receivable Ledger. The first money column is

SALES

FOR MONTH OF December 194

DATE		ACCOUNT DR.	INVOICE #	F	DEBIT: ACCOUNTS RECEIVABLE	DEBIT: CASH SALES	CREDIT: DEPARTMENT A	CREDIT: DEPARTMENT B	CREDIT: DEPARTMENT C
Dec	1	T. French	LA 342	1	650 00		240 00	410 00	
	3	N. Potter	LA 343	2	510 00		165 00	230 00	115 00
	5	K. Simon	LA 344	3	192 00		192 00		
	5	Cash	C. S.	✓		315 50	128 00	114 60	72 90
	7	J. Jones	LA 345	4	180 00		100 00		80 00
	9	A. Johnson	LA 346	5	725 00		295 00	246 00	184 00
	11	B. Thomas	LA 347	6	214 80		111 80	42 00	61 00
	12	Cash	C. S.	✓		305 04	134 00	110 60	60 44
	13	N. Potter	LA 348	2	186 00		117 00	69 00	
	14	J. Jones	LA 349	4	48 00			48 00	
	16	T. French	LA 350	1	445 00		167 00	123 00	155 00
	18	K. Simon	LA 351	3	289 20		84 00	112 70	92 50
	19	Cash	C. S.	✓		284 32	117 80	109 40	21 12
	23	A. Johnson	LA 352	5	677 75		310 00	241 00	126 75
	26	N. Potter	LA 353	2	259 74		146 40	89 20	24 14
	27	J. Jones	LA 354	4	205 00		68 00	92 00	45 00
	28	Cash	C. S.	✓			110 00	115 00	95 00
	30	B. Thomas	LA 355	6	550 00		310 00	240 00	
					5123 49	1188 86	2796 00	2392 50	1132 85
					(101)	(✓)	(78)	(79)	(80)

provided for the total amount of the invoice to be debited or charged against the individual accounts kept in the Accounts Receivable Ledger. Posting from this column is usually done from day to day. The second money column is a column in which are listed all cash sales, and is placed there for the convenience of the bookkeeper, because it helps him segregate the cash sales from the sales on account. The column is not posted either daily or monthly and for this reason a check mark has been placed in the folio column alongside each cash sale and also at the end of the cash sales column. The debit to the cash account will, of course, be made from the Cash Receipts Book, where also the account is checked to prevent double posting to the Sales account. The amounts of both types of sales, cash sales and sales on account, are, of course, extended to the several departments as directed, and as indicated in the illustration. The amounts written in these columns are to be posted only in total at the end of the month to the credit of the three separate sales accounts kept in the General Ledger. In addition to posting the three sales accounts at the end of the period, as just indicated, it will be necessary to post the total of the *Accounts Receivable* column to the debit of the *Accounts Receivable Controlling* account. This posting to the General Ledger controls the separate postings made to the individual accounts kept in the subsidiary Accounts Receivable Ledger, as explained above.

CASH RECEIPTS BOOK

A cash receipts book designed for a departmental business will need no modification or expansion because the business is being operated on a departmental basis, but rather any good standard cash receipts journal should work satisfactorily. The form illustrated has been expanded slightly to make its use a little more convenient. The date column, the space for the account to be credited, and the explanation column need no introduction to the student, and their functions remain the same as always. The money columns, however, might be studied for a better understanding of their fullest use; with this purpose in mind, therefore, let us review the functions of each.

The first column, headed *Accounts Receivable,* is provided for credits to customers for the total of the account paid by their remittance in accordance with the credit terms. In our ex-

CASH RECEIPTS FOR MONTH OF *December* 194__

DATE	ACCOUNT CR.	EXPLANATION	F	CREDIT: ACCOUNTS RECEIVABLE	CREDIT: GENERAL LEDGER	CREDIT: CASH SALES	DEBIT: SALES DISCOUNTS	DEBIT: INTEREST EXPENSE	DEBIT: NET CASH RECEIVED
Dec. 2	W. Elder Capital.	Additional Invest.			1500 00				1500 00
3	Notes Payable	60 da. Bank Loan			2000 00			20 00	1980 00
5	Sales	C. S.	✓			315 50			315 50
9	T. French	Invoice 12/1		650 00			13 00		637 00
11	N. Potter	Invoice 12/3		510 00			10 20		499 80
12	Sales	C. S.	✓			305 04			305 04
15	K. Simon	Invoice 12/5		192 00			3 84		188 16
16	J. Jones	Invoice 12/7		180 00			3 60		176 40
19	Sales	C. S.	✓			284 32			284 32
20	B. Thomas	Invoice 12/11		214 80			4 30		210 50
22	N. Potter	Invoice 12/13		186 00			3 72		182 28
26	Notes Receivable	discounted Johnson Note 54 da.			725 00			6 52	718 48
28	Sales	C. S.	✓			320 00			320 00
30	Notes Payable	30 da. Bank Loan			1000 00			5 00	995 00
				1932 80	5225 00	1224 86	38 66	31 52	8312 48
				(101)	(✓)	(✓)	(43)	(91)	(1)

ample, on December 9, a check was received from T. French for \$637.00 to pay an account of \$650.00 less a 2% discount; therefore, in the Accounts Receivable column Mr. French is credited with the \$650.00, even though the net remittance is only \$637.00. This is true also with all other customers' accounts; they are credited in the Accounts Receivable Ledger column with the full amount of their accounts, the sales discount expense being charged for the difference between the remittance and the face of the account settled in accordance with the credit terms. The total of this column should be posted to the credit of the *Accounts Receivable Controlling* account in the General Ledger and will control the individual credits made in the subsidiary Accounts Receivable Ledger.

The second money column is provided for cash received from sundry sources for which no special column is provided. The amounts entered in this column are posted directly to the General Ledger to the credit of the Accounts responsible for the cash received, as, for example: On December 2 the proprietor, Mr. Elder, made an additional cash investment of \$1500.00. This amount is credited directly to his capital account in the General Ledger. In the same manner, on December 3, when the proprietor discounted his note at the bank, the *Notes Payable* account was credited directly in the General Ledger for \$2000.00, the face of the note payable. Because the individual credits from this column have been made directly to the General Ledger, the total must not be posted and is therefore checked.

The third money column lists all cash received from cash sales, and is provided so that cash received from all sources may be included in the Cash Receipts Book. The credit to *Sales* for all sales including cash sales having been made through the Sales Book, the individual credits to sales, as well as the total of the column, must not be posted from this book. A check mark placed in the folio column alongside each sale and below the total of the column will help prevent double posting.

The *Sales Discount* column is simply a convenience column to record all discounts allowed customers and deducted from their remittances in accordance with the credit terms. The column is posted in total only at the end of the period to the debit of the *Sales Discount* account in the General Ledger. The next column has been provided for *Interest Expense* deductions made

when notes are discounted. The introduction of this convenience column to the Cash Receipts Book makes split entries unnecessary. That is, formerly the interest expense had to be put through the General Journal leaving only the net cash received to be entered in the Cash Receipts Book. Such a split entry utilizing two journals has therefore been simplified, and the entire transaction can now be accommodated in the Cash Receipts Book. Furthermore, the column need be posted only in total, as indicated in the illustration. The final or *Net Cash Received* column operates as always. It is posted in total only once at the end of the period to the debit of the *Cash* account in the General Ledger.

CASH DISBURSEMENTS BOOK

A cash disbursements book designed for a departmental business need not be modified or expanded in any way because the business is operated on a departmental basis; but, as with the Cash Receipts Book, any good standard cash disbursements form should prove satisfactory. The form illustrated has been expanded slightly to make its use a little more convenient. The date column, the space for the account to be debited, and the explanation space need no introduction to the student, and their functions remain the same.

The money columns, however, might be studied for a better understanding of their fullest use; therefore, with this purpose in mind let us review the functions of each column.

The first money column, headed *Accounts Payable Ledger,* is provided for the debits to *Accounts Payable* accounts for the total of the account being paid by our check in accordance with the credit terms. In our example, on December 8 a check is sent to Mr. T. Walsh for $705.60 to pay our account in amount of $720.00 less a 2% discount; therefore in the *Accounts Payable* column, Mr. Walsh is debited with $720.00. even though the net remittance is only $705.60. This is true also with all other creditors' accounts: they are debited in the *Accounts Payable Ledger* column with the full amount of their account, the purchase discount being credited with the difference between the remittance and the face of the account settled in accordance with the credit terms. The total of this column should

CASH DISBURSEMENTS

DATE		ACCOUNT DR.	EXPLANATION	F	DEBIT: ACCTS. PAYABLE LEDGER	DEBIT: MISC'L GENERAL LEDGER	DEBIT: SALARIES AND WAGES	DEBIT: INTEREST EXPENSE	CREDIT: PURCHASE DISCOUNTS	CREDIT: NET CASH PAID OUT
Dec	2	Rent	Dec. to Realty Co.	3		150 00				150 00
	3	General Expense	Cleaning	18		18 00				18 00
	3	Office Equipment	Royal Type Exchg.	6		126 50				126 50
	4	Petty Cash Fund	To Increase Fund	2		100 00				100 00
	5	Notes Payable	Walsh Note 60 days	9		1200 00		12 00		1212 00
	6	Salaries	Weekly Pay Roll				320 00			320 00
	8	T. Walsh	Invoice 12/2	11	720 00				14 40	705 60
	10	F. Marsh	Invoice 12/3	12	860 00				17 20	842 80
	12	Harrison Supply Co.	Invoice 12/5	13	1289 00				25 78	1263 22
	13	Salaries	Weekly Pay Roll				320 00			320 00
	14	Notes Payable	Pd. 90 da. Note (Marsh)	9		840 00		12 60		852 60
	16	F. Marsh	Invoice 12/9	12	750 00				15 00	735 00
	18	Auto Truck	Down Pay't.	9		660				660 00
	20	Salaries	Weekly Pay Roll				320 00			320 00
	23	T. Walsh	Invoice 12/14	11	117 00				2 34	114 66
	24	Harrison Supply Co.	Invoice 12/16	13	961 00				19 22	941 78
	27	Salaries	Weekly Pay Roll				320 00			320 00
	29	Notes Payable	30 da. Harrison Note	9		1550 00		7 50		1507 50
					4697 00	4594 50	1280 00	32 10	93 94	10509 66
					(24)	(✓)	(16)	(91)	(42)	(1)

be posted to the debit of the *Accounts Payable Controlling* account in the General Ledger.

The second money column is provided for disbursements to miscellaneous General Ledger accounts. The items in this column are posted daily to the accounts in the General Ledger, and the total of the column is checked to prevent double posting.

The third money column, headed *Salaries and Wages,* is a convenience column in which are listed all payments made for salary and wages. The column is posted in total only at the end of the month. The *Interest Expense* column likewise has been added simply for the convenience of the bookkeeper. The total of this column is also posted only in total at the end of the month. The *Purchase Discount* column and the *Net Cash* column need no explanation here because they are posted as explained before in our first treatment of special journals.

THE GENERAL JOURNAL

The six-column General Journal form, as used in the first chapter treating with controlling accounts, will serve very well in any business including, of course, a departmental one. It will not be necessary nor desirable at present to illustrate or explain the form further. For review the student may refer to the earlier chapter on Controlling Accounts.

NOTES RECEIVABLE BOOK

A notes receivable book will prove a valuable addition to any accounting system if the business receives more than a few notes. In such a case a *Notes Receivable Register* similar to the one illustrated herewith should prove satisfactory in most cases.

The operation of this journal may be apparent from observation of the form; however, a brief explanation of the several columns may be helpful to the beginning student.

At the extreme left are two date columns; the first is provided for the date the note was received, while the second column is for the date of the instrument. The next space is provided for the name of the account to be credited. Then follows the usual ledger folio column. The face of the note is next listed, after which is provided space for the maker or drawer's name (maker for notes, drawer for trade acceptances or drafts),

NOTES RECEIVABLE REGISTER

(LEFT PAGE)

DATE RECEIVED		DATE OF NOTE		ACCOUNT CREDIT (RECEIVED FROM)	FOLIO	FACE AMOUNT		MAKER OR DRAWER	INDORSERS
April	7	April	5	Stevenson Brothers	163	1200	00	John W Stevenson and James M Stevenson	none
	8	April	7	Brown & Co. Inc.	112	800	00	Brown & Co. Inc.	J. F. Brown
	12	April	10	Gold, Cohn & Co.	84	1560	00	Samuel Gold Louis Cohn	none
	15	April	12	John M. Thomas	71	200	00	John M. Thomas	J. B. Wells 14 Hazel St City

(RIGHT PAGE)

WHERE PAYABLE	RATE	TERM	MATURITY												DISPOSITION		
			JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	DATE		METHOD
Citizens National Bank, City	6	2 months						5									
First National Bank, Milltown	6	30 days					7										
Gold, Cohn & Co Office 30 Main St. City	5	3 months							10								
Citizens National Bank, City	6	60 days						11									

followed by a space in which indorsers' names, if any, should be registered. At the end of the month the amount column is added and the total is debited to the *Notes Receivable* account in the General Ledger; the credit should be posted in total to the *Accounts Receivable Controlling* account in the General Ledger. Each day, as the notes are received and entered in the register, the individual accounts are credited in the Accounts Receivable Ledger.

The form illustrated will be very helpful in managing notes receivable; for instance, the maturity date is very easily observed. Most cashiers or treasurers send out notices from a week to ten days prior to maturity, then, as notes mature, their disposition is registered. If a note is paid in full, as we expect, that fact is noted and a cash receipts book reference may be indicated for cross reference. If the note is renewed in whole or part, then that fact is likewise recorded.

If a company receives a great many notes, an alternative method for recording notes in this same form may be put into operation. In such a case, one or more pages of the register are provided for each of the twelve months of the year. As each note is received, it is entered on the page of the month the note matures. Thus notes received during April would be recorded in the month of their maturity. At the end of each month the notes received in that month are summarized and the totals posted as before. The advantages of this alternative use is that all maturities are grouped together by months and their collection and other handling is somewhat facilitated.

If notes are received in great volume and the notes are payable in a series of equal installments, as with a finance company, then such a register as illustrated would not be satisfactory. In this instance the note is merely considered collateral for an account which is opened to each customer. A notes receivable controlling account is kept in the General Ledger and cards are opened for each account. As payments are received, they are recorded in a special Cash Receipts Book, from which they are credited to the individual cards or account books, as they are sometimes called. The total cash receipts from notes is posted from the total of the special column in the Cash Receipts Book to the *Notes Receivable* account in the General Ledger. The balance of the control account should, of course, agree with

the total due from all notes outstanding as listed from the customers' book or cards.

SALES RETURNS JOURNAL

This book will be used when the number of returns warrant it. That is, if there are relatively few returns, then a special journal for returns is not warranted, and returns will be recorded as usual through the General Journal. On the other hand, just as soon as the number of returns grows to a sizable figure, the use of a special journal will become apparent. When separate *Purchase* and *Sales* accounts are being operated for each department, then separate Sales Returns accounts must be maintained. This is necessary so that we may prepare departmental profit and loss statements. No illustration of a Sales Returns Book need be given at this time, but a brief explanation of the function and the use of such a form may be appropriate. The form, beside the usual date column, would provide space for the account to be credited for the return, and then a total column might be provided as well as separate columns by departments. The operation of the book would be quite similar to the operation of the Sales Book, except, of course, that the postings would be credits to the customers and debits to the Sales Returns account.

OTHER SPECIAL JOURNALS

There are several other special journals which might be used in individual businesses as the case warranted. The guiding principle is to open a special journal to record any group of similar accounts or facts if the volume of such similar transactions warrants a special journal. It is one of the duties of the practicing accountant, the controller, or one of his assistants to design these special journals as their need becomes apparent. Consider, for instance, a company which holds considerable real estate. Such a company might be able to use a *Mortgage Register,* a book similar to, but more elaborate than, the Notes Receivable Register illustrated in this chapter. The same company would probably also require an *Insurance Register.* This book would record all insurance policies held and would make it possible for the management to note easily the adequacy of insurance coverage.

DEPARTMENTAL PROFIT AND LOSS STATEMENTS

Probably the most important reason for operation of departmental books is that such records may be available for the preparation of income profit and loss statements by departments. Such statements will make it possible for the management to determine the relative value of departments or products, as a study of the statements which follow will make apparent.

DEPARTMENTAL PROFIT AND LOSS STATEMENTS ILLUSTRATED

In order to visualize best the use and operation of the profit and loss statement by departments, an after-adjustment trial balance is presented, from which the departmental profit and loss statement was prepared.

THE ROGERS-HILLARD COMPANY, INC.

Adjusted Trial Balance as of December 31, 19—

Cash	$ 22,415.00	
Accounts Receivable	33,810.00	
Notes Receivable	6,000.00	
Reserve for Doubtful Accounts		$ 642.00
Inventory Dept. A. Jan. 1, 19—	12,120.00	
Inventory Dept. B. Jan. 1, 19—	8,492.00	
Inventory Dept. C. Jan. 1, 19—	9,250.00	
Land	2,000.00	
Buildings & Equipment	36,000.00	
Reserve for Dep. of Bldgs. & Equip.		3,960.00
Selling Expense Dept. A.	8,096.00	
Selling Expense Dept. B.	6,072.00	
Selling Expense Dept. C.	5,816.00	
General & Ad. Exp. Dept. A.	6,500.00	
General & Ad. Exp. Dept. B.	4,060.00	
General & Ad. Exp. Dept. C.	4,225.00	
Interest Expense	118.00	
Interest Income		172.00
Purchase Discounts		196.00
Sales Discounts	244.00	
Sales Dept. A.		81,960.00
Sales Dept. B.		65,840.00
Sales Dept. C.		64,810.00
Return Sales & Allow. Dept. A.	1,246.00	
Return Sales & Allow. Dept. B.	820.00	

Return Sales & Allow. Dept. C	$ 915.00	
Prepaid Advertising	120.00	
Prepaid Insurance	215.00	
Accounts Payable		$ 28,740.00
Mortgage Payable		18,000.00
Purchases Dept. A.	61,590.00	
Purchases Dept. B.	47,343.00	
Purchases Dept. C.	44,767.00	
Return Purchases Dept. A.		840.00
Return Purchases Dept. B.		618.00
Return Purchases Dept. C.		582.00
Capital Stock Authorized		100,000.00
Unissued Capital Stock	60,000.00	
Surplus		15,874.00
Inventory Dept. A. Dec. 31, 19—	11,400.00	
Inventory Dept. B. Dec. 31, 19—	7,205.00	
Inventory Dept. C. Dec. 31, 19—	8,462.00	
Profit & Loss Summary (new inventories)		27,067.00
	$409,301.00	$409,301.00

The trial balance has been made complete, in so far as accounts required for our immediate use are concerned, but otherwise in order to conserve space the number of other accounts has been kept to the minimum. The current expense for doubtful accounts, several depreciation expense accounts, advertising, delivery expense, and all other miscellaneous selling, general, and administrative expenses have been transferred to *Selling Expense* and *General and Administrative Expense* accounts by departments.

The illustration shown herewith was prepared from the foregoing adjusted trial balance.

A study of the statement above will yield many interesting facts, and from which many helpful observations may be made. One or two such general observations are given, but only to illustrate the use which may be made of such statements. Further facts and an intimate acquaintance with a particular case would make the observations more accurate and more helpful.

A first and general observation might be with regard to the relative profitableness of the three departments. In Department C for example, although the sales are less than B and much less than A, it is nevertheless the most profitable. Its net operating profit is $8881.00, based on $64,810.00 of sales — a

THE ROGERS-HILLARD COMPANY, INC.

PROFIT AND LOSS STATEMENT BY DEPARTMENTS FOR THE YEAR ENDED

	DEPT. A	DEPT. B	DEPT. C	TOTAL	DEPT A	DEPT B	DEPT C	TOTAL
Income from Sales					81960 00	65840 00	64810 00	212610 00
Less Return Sales & Allowances					1246 00	820 00	915 00	2981 00
Net Sales					80714 00	65020 00	63895 00	209629 00
Deduct the Cost of Goods Sold								
Purchases	61590 00	47343 00	44767 00	157700 00				
Less Returns & Allowances	840 00	618 00	582 00	2040 00				
Net Purchases	60750 00	46725 00	44185 00	155660 00				
Add Inventory Jan. 1, 194	12120 00	8492 00	9250 00	29862 00				
	72870 00	55217 00	53435 00	185522 00				
Deduct Inventory Dec. 31, 194	11400 00	7205 00	8462 00	27067 00				
Cost of Goods Sold					61470 00	48012 00	44937 00	154455 00
Gross Profit on Sales					19244 00	17008 00	18922 00	55174 00
Less Selling Expense					8096 00	6072 00	5816 00	19984 00
Net Profit on Sales					11148 00	10936 00	13106 00	35190 00
Less General & Administrative Expense					6500 00	4060 00	4225 00	14785 00
Net Profit on Operations					4648 00	6876 00	8881 00	20405 00
Deduct Non Operating Expense								
Interest Expense							118 00	
Sales Discounts							244 00	
								362 00
								20043 00
Add Non Operating Income:								
Interest Income							172 00	
Purchase Discounts							196 00	
								368 00
Net Profit for the Year								20411 00

percentage gain of 13.6%, while Department B operated at a gain of 10.4% and Department A was profitable to the extent of only 5.7%.

Based on these facts, it should be apparent that if possible Department C should be developed, while the activities of Department A might well be curtailed. This is, of course, a very general observation, for, while it might be very well to build up and develop Department C, it is just possible that Department A may be indispensable to the organization and must be continued. A good illustration taken from an actual case was that of a large drug store which operated many departments. The management found that its Soda Fountain, which we shall call Department C, was very profitable, and, of course, the company did all possible to build up this department. The best space was given to the fountain, its size was expanded at the expense of a lending library which was discontinued because it did not pay enough. In this case Department A was the Pharmacy and Prescription Compounding Department and was vital to the continuation of a drug store; therefore, while it was put farther into the back of the store, some of the room gained was given to the Cosmetics Department which also was more profitable and could not be discontinued.

A further study of the departmental expenses — selling and the general and administrative expenses — might yield some very interesting facts, but we shall not go further into this absorbing work of interpretive accounting at this time.

QUESTIONS ON THE CHAPTER

1. What is the real value of departmentalized records?
2. Mention several departments you might designate if you were preparing a new accounting system for a large modern retail drug store.
3. Outline the departments you would install for a retail hardware store under the same circumstances.
4. Assume you are engaged to install a system of records for a newly formed Super Market, which will operate separate departments for: 1. Groceries, 2. Meats, 3. Fruits and Vegetables, 4. Dairy Products. Based on these facts draft a Purchase Book, and explain its use and operation in the system.
5. For the same business and based on the same facts draft a Sales Book, and explain its use and operation in the system.

6. Assume the same engagement as above, and further that all sales are for cash. Based on these facts design a good Cash Receipts Book.

7. Assume the same facts as before for the same Super Market, and further that the company plans to use a subsidiary Accounts Payable Ledger. Draft a good Cash Disbursements Book, include in addition to all usual columns convenience columns for "Interest Expense," and "Advertising."

8. Would the General Journal have to be especially designed for the Super Market? Explain why or why not.

9. Draft a Profit and Loss Statement which might be prepared from the system of books you have just designed. You supply illustrative figures, and explain its operation as far as gross profits by departments are obtained.

10. What are some of the conclusions one might get from a study of such a departmentalized statement?

PROBLEM MATERIAL

Problem 1

November 1.

T. Wentworth starts business with a cash investment of $5000.00. He specializes in the wholesale distribution of shoes, hosiery, and sundries. He uses a departmental system of accounts in his business. The books will be kept on a departmental basis, Department A — Shoes; Department B — Hosiery; Department C — Sundries. Rent to the amount of $300.00 was paid for one month. Office Equipment was bought from the United Office Supply Co. to the amount of $450.00, on account — terms 2/10, n/30.

November 2.

Purchased a typewriter from the Remington Co., $125.00 Cash.

November 3.

Purchased $2500.00 of shoes from the Freeman Shoe Co. on account — terms 2/10, n/30. Purchased from the Benson Bros. hosiery, $250.00 and shoes, $100.00 — terms 2/10, n/30.

November 4.

Purchased $2200.00 of shoes, $1200.00 of hosiery, and $1300.00 of sundries from the General Supply Co. on account — terms 2/10, n/30.

November 5.

Sold $250.00 of shoes, $100.00 of hosiery, and $50.00 of sundries to Dodson and Sons, on account — terms 2/10, n/30.

November 6.

Purchased $1450.00 of hosiery from the Johnson Hosiery Co. on account — terms 2/10, n/30.

November 8.

Sold to Jones Bros. Inc. on account, $500.00 worth of shoes, $200.00 worth of hosiery, and $80.00 worth of sundries — terms 2/10, n/30. Bought from Meeker Co. $750.00 worth of hosiery and $300.00 worth of sundries — terms 2/10, n/30.

November 9.

Sent check for $441.00 to the United Office Supply Co. in full payment of account. Cash Sales to date were: shoes, $300.00, hosiery, $450.00, and sundries, $356.00.

November 10.

Received a check from Dodson and Sons in full payment of invoice of November 5th.

November 11.

Holiday.

November 12.

Paid General Supply Co. invoice of November 4. Purchased $950.00 worth of shoes from the Freeman Shoe Co., on account terms 2/10, n/30. Sold to Barton's Dept. Store, on account, $700.00 worth of shoes, $400.00 worth of hosiery, and $257.00 worth of sundries — terms 2/10, n/30.

November 13.

Sold to Cannon Shoe Co. $650.00 worth of shoes on account — terms 2/10, n/30. Paid Johnson Hosiery Co. invoice of November 6.

November 15.

Paid salaries to date $250.00. Purchased from Johnson Hosiery Co. hosiery to the amount of $790.00, terms 2/10, n/30. Received from Jones Bros. Inc. a check in full payment of invoice of November 8.

November 16.

Paid Meeker Co. invoice of November 8. Cash Sales to date: shoes $783.00, hosiery $1432.00, sundries $359.00. Sold to Jones Bros. Inc. on account, $400.00 worth of shoes, and $70.00 worth of sundries — terms 2/10, n/30.

November 17.

Purchased from Meeker Co. to the amount of $80.00 in shoes, $53.00 in hosiery, and $40.00 in sundries — terms 2/10, n/30.

November 18.

Purchased from the General Supply Co. to the amount of $400.00 in shoes, $30.00 in hosiery, and $1030.00 in sundries — terms 2/10, n/30.

November 19.

Barton's Dept. Store sent us a check for $357.00 and a 60-day note for $1000.00 in payment of invoice of November 12. The Cannon Shoe Co. sent us a check for invoice of November 13 less discount.

November 20.

Unsatisfactory shoes were returned to the General Supply Co. for

which we received a credit memo of \$150.00. Paid Johnson Hosiery Co. invoice of November 15. Jones Bros., Inc., sent us a check in payment of invoice of November 16.

November 22.
Purchased \$2800.00 worth of shoes from the Freeman Shoe Co. on account — terms 2/10, n/30. Sold to Cannon Shoe Co., shoes to the amount of \$875.00 on account — terms 2/10, n/30.

November 23.
Cash Sales to date amount to \$954.00 of shoes, \$800.00 of hosiery, and \$300.00 of sundries.

November 24.
Sales on account to Barton's Dept. Store amounted to \$200.00 of shoes, \$240.00 of hosiery, and \$140.00 of sundries, terms 2/10, n/30. Received a check from Cannon Shoe Co. in full payment of invoice of November 22. Cost of window cleaning to date was \$5.00 — gave check for amount.

November 25.
Sold to Dodson and Sons on account, shoes, \$250.00, hosiery, \$400.00, and sundries, \$350.00 — terms 2/10, n/30. Sent check to Meeker Co. in payment of invoice of November 17.

November 26.
Purchased from Meeker Co. on account, shoes, \$500.00, hosiery, \$350.00, and sundries, \$50.00 — terms 2/10, n/30. Barton's Dept. Store returned \$145.00 worth of unsatisfactory hosiery for which we gave them credit. Mr. Wentworth invested an additional \$1000.00.

November 27.
Paid salaries to date \$250.00. Bought from the General Supply Co., on account, shoes, \$300.00, hosiery, \$257.00, and sundries, \$50.00, terms 2/10, n/30.

November 29.
Paid General Supply Co. invoice of November 18, discount allowed, less credit memo. Sold to Cannon Shoe Co. on account, shoes, \$750.00 — terms 2/10, n/30. Received a check from Dodson and Sons in payment of invoice of November 25.

November 30.
Cash Sales to date: shoes, \$424.00, hosiery, \$350.00, sundries, \$356.00.

Required: Using columnar paper, head the books of original entry as follows:

(1) A Cash Disbursements Book with columns headed: Account Debit, Folio, General Ledger Debit, Wages and Salaries, Accounts Payable, Purchase Discounts, and Net Cash.

(2) A Cash Receipts Book with columns headed: Account Credit, Folio, General Ledger, Cash Sales, Accounts Receivable, Sales Discounts, Net Cash.

(3) A Sales Book with 7 columns: Sales on Account with one col-

umn for each department, Sales for Cash with one column for each department, and Total Sales.

(4) A Purchase Book with 4 columns: Purchases on Account with one column for each department, and a final column for Total Purchases.

(5) A standard six-column General Journal.

With these books of original entry enter the foregoing transactions and total all books for posting.

Post these books to the General Ledger and subsidiary Accounts Receivable and Accounts Payable Ledger.

Take a trial balance of the General Ledger after the subsidiary ledger balances have been checked with their controlling accounts.

Problem 2

October 15.

The American Drug Co., Inc., was chartered this day under the laws of the State of New Jersey, as distributors to the wholesale drug trade. It was authorized to issue 1000 shares of common capital stock with a par value of $100.00 per share. The original subscribers to the application for the charter pay in the following sums, and stock certificates are issued as indicated below:

20 shares to Mr. G. Edwards	$2000.00
20 shares to Mr. H. Thompson	$2000.00
10 shares to Mr. S. Miller	$1000.00

The corporation is organized with Mr. Edwards as the President, Mr. Thompson as the Treasurer, and Mr. Miller as the Secretary. The corporation agrees to take over the partnership business formerly conducted by Messrs. Edwards, Thompson, and Miller, issuing capital shares at par value to the partners for their equities. The Board of Directors accepts the following balance sheet as the basis of the agreement:

E. T. M. Partnership

Balance sheet as of October 15, 19—

Assets		*Liabilities*		
Cash	$ 4,200.	Notes Payable	$ 2,000.	
Accounts Receivable	6,300.	Accounts Payable	3,800.	
Raw Drugs	3,000.	Mortgage Payable	7,000.	
Patent Medicines	4,500.	*Total Liabilities*		$12,300.
Specialty Goods	4,800.			
Laboratory Equip.	4,000.	*Net Worth*		
Land and Buildings	10,000.	Edwards, capital	$12,000.	
Good-will	3,000.	Thompson, capital	8,000.	
		Miller, capital	7,000.	
		Total Net Worth		27,000.
Total Assets	$39,800.	*Total Liabilities & Net Worth*		$39,800.

The *Accounts Receivable* account balances were as follows:

Lincoln Drug Supply Co.	$1360.00
Metropolitan Drug Stores Inc.	1420.00
Sanitary Products Co., Inc.	1320.00
Thomas Drug Supply Co.	1425.00
Simpson Drug Co.	775.00
	$6300.00

The *Accounts Payable* account balances were as follows:

Allied Chemical Co., Inc.	$2000.00
Premier Drug Mfg. Co.	1800.00
	$3800.00

New books are to be opened as follows: A four-column General Journal with headings: Accounts Payable Debit, General Ledger Debit, General Ledger Credit, and Accounts Receivable Credit; an Accounts Receivable Ledger and an Accounts Payable Ledger; a Cash Receipts Book with money columns headed: General Ledger, Accounts Receivable, Sales Discounts, Interest Expense, and Net Cash Received; a Cash Disbursements Book with money columns headed: General Ledger, Accounts Payable, Purchase Discounts, Interest Expense, and Net Cash Paid. Purchase and Sales Books will be kept for a three-department business, as follows: Raw Drugs and Chemicals Dept. A., Patent Medicines Dept. B., Specialty Goods Dept. C.

Write journal entries to open the new books and post to the three ledgers as required, being certain to open control accounts in the General Ledger and individual accounts in the subsidiary ledgers. With the books properly opened, enter the following transactions:

October 16.

Paid Organization Expenses as follows: Rea & Rea for accounting services, $500.00; J. Long for legal services, $820.00; Newark Printing Co., $120.00. A shipment and invoice from the Allied Chemical Co. as follows — Raw Drugs, $1040.00; Sundry Items, $160.00 — terms 2/10, n/30. Purchased from the Premier Drug Co., Raw Drugs, $320.00; Patent Medicines, $1060.00; Sundries, $820.00 — terms 2/10, n/30. The bank approves a loan and discounts at 6% the corporation's 60-day note for $2000.00, crediting the corporation's account with the proceeds. Sold on account to the Sanitary Products Co., Raw Drugs, $41.00; Sundries, $286.00. Note: All sales are made on uniform credit terms of 2/10, n/30.

October 18.

New Laboratory Equipment was purchased from the New Jersey Laboratory Equipment Co. — total invoice was $1740.00 to be paid as follows: cash $540.00 and finance notes for the balance payable $100.00 per month. Sold on account to the Thomas

Drug Co., Raw Drugs, \$110.00; Patent Medicines, \$214.00; Sundries, \$196.00. Received a check for \$1332.80, from the Lincoln Drug Supply Co. as full settlement of their balance less 2%.

October 19.

Sold on account to the Sanitary Products Co., Raw Drugs, \$65.00; Sundries, \$354.00. Issued check in payment of Freight on the Laboratory Equipment, \$60.00 and \$50.00 to the Laboratory Equipment Co. representative for installing the new equipment. Received a check from the Sanitary Products Co. in amount of \$1293.60 full settlement of old balance less 2%. Gave a check to Premier Drug Co. for \$1764.00 payment of old balance less 2%. Gave check to Allied Chemical Co. for their old balance less 2%. Received a check from the Thomas Drug Co., \$1396.50, payment of old balance less 2%.

October 20.

Sold on account to the Lincoln Drug Supply Co., Raw Drugs, \$317.00; Patent Medicines, \$213.00; Sundries, \$316.00.

October 21.

Sold on account to the Thomas Drug Supply Co., Raw Drugs, \$145.00; Patent Medicines, \$258.00; Sundries, \$215.00.

October 22.

Paid salesmen's weekly salaries of \$125.00, also General Office Salaries of \$180.00. Sold on account to the Lincoln Drug Supply Co., Raw Drugs, \$324.00; Patent Medicines, \$246.00; Sundries, \$340.00.

October 23.

We received an order from the Metropolitan Drug Stores Inc., Raw Drugs, \$420.00; Patent Medicines, \$432.00; Sundries, \$748.00; together with a 60-day 6% note for \$2000.00 dated October 23 and their check for \$999.60 as full payment of their old balance plus the amount of their current purchase less 2% on the amount subject to cash discount. The \$2000.00 note just received is discounted at the Local National Bank (discount rate 6%) and the bank account is credited with the proceeds. Sold on account to Simpson Drug Co., Raw Drugs, \$85.00; Patent Medicines, \$110.00; Sundries, \$33.00.

October 24.

A shipment and invoice arrived from the Allied Chemical Co., Raw Drugs, \$1650.00; Sundries, \$190.00 — terms 2/10, n/30. Some of the raw drugs just received from the Allied Chemical Co., Inc. were spoiled in transit and had to be returned for credit, for which a debit memo in amount of \$160.00 is issued.

October 25.

Purchased from the Premier Drug Co., Raw Drugs, \$446.00; Patent Medicines, \$1024.00; Sundries, \$930.00 — terms 2/10, n/30. Gave a check for \$2156.00 to the Premier Drug Co. in full payment of invoice of October 16. Received a 60-day

non-interest-bearing note date October 25 from the Lincoln Drug Supply Co. for $846.00 in full payment of invoice of October 20. We discount this note at the Local National Bank discount rate 6% and the bank credits our account with the proceeds. Received a check from the Sanitary Products Co. in full payment of invoice of October 16. We give our 60-day 6% note to the Allied Chemical Co. for $1680.00 for the balance due on purchase of October 24.

October 26.

A shipment arrived from the United Chemical Co., Inc., Raw Drugs, $1445.00; Patent Medicines, $155.00. Terms agreed to were bill of lading with sight draft attached. We gave the Local National Bank our check for $1600.00 full acceptance of draft and receive the bill of lading. Received a check, $759.50, from the Simpson Drug Co. for invoice of October 15 less 2%. Sent our check to the Allied Chemical Co. for $1176.00 full settlement of invoice of October 16.

October 27.

Gave a check for $64.00 to the *Local News* for advertising to date.

October 28.

The bank approved our application for a loan and discounted our $2000.00 60-day note, crediting our account with the proceeds (discount rate 6%). Received a check from the Sanitary Products Co. for $410.62 in payment of invoice of October 19 less 2%. Also received a check from the Thomas Drug Co. for invoice of October 18 less 2%. Purchased from the United Chemical Co., Inc., Raw Drugs, $1000.00; Patent Medicines, $400.00; our credit rating is approved and terms are 2/10, n/30. Purchased from the Allied Chemical Co. terms 2/10, n/30, Raw Drugs, $1700.00; Sundries, $260.00. Sold on account to the Lincoln Drug Supply Co. $117.00 in Raw Drugs; $113.00 in Patent Medicines; and $185.00 in Sundry Items. Sold on account to Metropolitan Drug Stores Inc., Raw Drugs, $60.00; Patent Medicines, $125.00; Sundry Items, $233.00.

October 29.

Drew checks — Salesmen's Salaries for $125.00 and General Office Salaries for $180.00. Sold on account to the Sanitary Products Co., Raw Drugs, $180.00; Sundry Items, $234.00.

October 30.

We received an order from the Simpson Drug Co. for which we bill them, Raw Drugs, $110.00; Patent Medicines, $156.00; Sundries, $46.00. They also claim $24.00 for Patent Medicines which arrived in damaged condition, and for which they furnish us a claim list signed by the railroad company. We issue a credit memo for $24.00. Purchased from the Premier Drug Co. terms 2/10, n/30, Patent Medicines, $802.00; Sundry Items, $698.00. Received a check for $605.64 from the Thomas Drug Co.

invoice of October 21 in full. Sent our check for $175.00 to the New York Trust Company as the six months' interest due October 31 on our Mortgage Payable.

October 31.

A shipment and invoice arrived from the United Chemical Co. for Raw Drugs, $310.00; Patent Medicines, $505.00; terms 2/10, n/30. Sold on account to the Thomas Drug Co. Raw Drugs, $218.00; Patent Medicines, $316.00; Sundry Items, $280.00.

Required:

(1) Open all books of original entry as directed and enter the foregoing transactions. Total and cross check the books.

(2) Using a General Ledger, an Accounts Receivable Ledger, and an Accounts Payable Ledger, post the books of original entry.

(3) Check the balance of the two control accounts with the totals of the individual account balances from the subsidiary ledgers.

(4) Take a trial balance of the General Ledger.

CHAPTER XX

ACCOUNTING FOR THE MANUFACTURER

INTRODUCTION

All of the material presented to this point has been taken from trading and mercantile businesses. Nothing has been said about the accounting problems peculiar to the manufacturer. The trading or mercantile business buys a finished product, and sells it in the same condition. The manufacturer, on the other hand, buys raw materials and converts them, through his particular manufacturing process, into finished goods ready to sell. Some manufacturers only manufacture, their output being marketed by a distributing agency. Other manufacturers make and sell their product. The manufacturer who markets his own product will, of course, have to keep in addition to the records required by a manufacturer all the records of a trading company which we have studied thus far. We shall now look at some of the accounting problems met with by the manufacturer.

The manufacturer does not buy a finished product at a price, but must buy the necessary raw materials and make the product. Obviously, a manufacturer must be able to sell his product after it has been manufactured, and he must sell it in competition with all organizations manufacturing the same item. The manufacturer, therefore, must know his costs. He must be able to produce at a figure which will permit him to sell in competition and at the same time make a profit. His costs must be accurate. This means usually a more elaborate and carefully planned system and set of accounts.

THE SUBJECT OF COST ACCOUNTING

In most schools teaching business administration, beside the fundamental accounting course, a separate course in Cost Accounting is usually included. It is not the purpose in this chapter to brief Cost Accounting, but rather to mention a few of the more important elements of Cost Accounting. We shall see how the accountant prepares data on costs, how the costs are gathered or summarized, and, finally, how the manufacturing statements are prepared.

THREE ELEMENTS OF MANUFACTURING COSTS

In manufacturing there are three principal elements of cost: 1. Raw Materials, 2. Direct Labor required to convert the raw materials into finished goods, and, 3. The Indirect Manufacturing Expenses. Those expenses which cannot be directly applied to the cost of manfacturing are sometimes spoken of as the factory Overhead or Burden. Let us look for a moment at each of these three elements of cost.

RAW MATERIALS

Under this caption is included the cost of all materials which enter into and become a part of the item being manufactured. Materials used incidentally in the operation of the factory, such as coal to produce steam to propel the machinery, are not included in this group because the coal does not become part of the finished product.

DIRECT LABOR

We understand by direct labor the wages paid to those who are working directly on production, whose wages may be directly charged to a particular job or process. Indirect labor, on the other hand, consists of all wages paid for services incidental to the process of manufacturing. In the first class, direct labor, would ordinarily be included wages paid to workers who operate machines or tools in the manufacturing process, while the superintendent's salary and salary paid for the planning department are both part of the indirect labor cost.

INDIRECT MANUFACTURING EXPENSE

Indirect labor just differentiated from direct labor is one of the principal items under this caption. Indirect manufacturing expense or manufacturing overhead, as it is frequently called, includes all those manufacturing costs not included in the first two major divisions of costs. Such accounts, as taxes on factory buildings, factory property insurance, depreciation of factory machinery and equipment, are all good examples of accounts in this latter classification.

THE MANUFACTURING STATEMENT

Perhaps one of the best ways for a student to get a bird's-eye view of some of the features and peculiarities of accounts kept for a manufacturing enterprise is through a study of a Profit and Loss Statement used by a manufacturing company, together with some of the supporting schedules.

In this respect we shall present a profit and loss statement of a manufacturing company in condensed form, together with supporting schedules.

THE USE OF SCHEDULES IN STATEMENTS

The accompanying profit and loss statement of the Jordan Manufacturing Company, Inc. is presented as a condensed statement. In order fully to comprehend the activities of the company, one would have to study the supporting schedules. By the use of these schedules it is possible to get a profit and loss statement on one sheet of paper and make the entire operations visible. This would not, of course, be possible if all the materials presented in the schedules were worked into the Profit and Loss Statement. The statement would be rather long and hard to visualize.

EXHIBIT B

THE JORDAN MANUFACTURING COMPANY, INC.,

Statement of Income Profit and Loss for the year ended Dec. 31, 19—

Gross Income from Sales		$310,217.00
Deduct Returns and Allowances ..		2,210.00
Net Sales		308,007.00
Deduct the Cost of Goods Sold:		
Inventory Finished Goods Jan. 1 .	$ 25,200.00	
Add "Cost of Goods Manufactured" Schedule B 1	217,443.00	
	242,643.00	
Less Inventory Finished Goods Dec. 31	26,090.00	
Cost of Goods Sold		$216,553.00

Gross Profit on Sales			$ 91,454.00
Deduct Selling Expenses Schedule B 2			39,770.00
Net Selling Profit			51,684.00
Deduct General & Administrative Expense Schedule B 3			19,268.00
Net Profit from Operations			$ 32,416.00
Deduct Net Non-Operating Expense:			
Non-Operating Expense:			
Bond Interest	$ 6,000.00		
Interest Expense ...	780.00		
Sales Discounts	2,460.00		
		$ 9,240.00	
Less Non-Operating Income:			
Purchase Discounts .	$ 1,020.00		
Rental Income	960.00		
Interest Earned	198.00		
		2,178.00	
			7,062.00
Net Profit			$ 25,354.00

SCHEDULE B 1

Cost of Goods Manufactured

Inventory Work in Process Jan. 1			$ 20,135.60
Add Material Consumed:			
Inventory Raw Materials Jan. 1 ..		$ 12,230.00	
Add Pur. Raw Mats. ..	$180,000.00		
Freight Inward	640.00		
	180,640.00		
Less Returns	6,200.00		
		174,440.00	
		186,670.00	
Deduct Inv. Raw Mats. Dec. 31		14,712.00	
Cost of Materials used			171,958.00
			192,093.60
Add: Direct Labor			20,104.00
Manufacturing Expense Sched. M.			29,848.40
			242,046.00
Deduct Inv. Work in Process Dec. 31			24,603.00
Cost of Goods Manufactured			$217,443.00

SCHEDULE M

Manufacturing Expenses

Indirect Labor		$ 8,630.00
Indirect Materials:		
Old Inventory	$1,000.00	
Add Purchases	1,500.00	
	2,500.00	
Less New Inv.	1,300.00	
Materials and Supplies Used		1,200.00
Taxes (factory)		600.00
Royalties Expense		1,230.00
Light, Heat & Power (factory)		3,006.00
Repairs & Maintenance of Machinery		614.00
Repairs & Maintenance of Buildings		244.00
Factory Superintendent		5,000.00
Compensation Insurance		1,800.00
Federal Old-Age Insurance Tax		663.00
Depreciation of Tools		1,605.40
Depreciation of Machinery		4,000.00
Depreciation of Buildings		1,256.00
		$29,848.40

SCHEDULE B 2

Selling Expenses

Salesmen's Salaries	$21,800.00
Salesmen's Commissions	6,200.00
Advertising	3,740.00
Delivery Expense	3,620.00
Freight Outward	810.00
Sales Office Salaries	3,600.00
	$39,770.00

SCHEDULE B 3

General and Administrative Expense

Taxes	$ 400.00
Light, Heat & Power	250.00
Officers' Salaries	12,000.00
Office Salaries	4,600.00
Telephone & Telegraph	374.00
Office Supplies	814.00
General Insurance	700.00
Depreciation Office Equipment	130.00
	$19,268.00

SCHEDULE OF COST TO MANUFACTURE

The principal schedule is that of *Cost to Manufacture, B 1* above. This schedule exhibits the several cost accounts required to measure the cost to manufacture the product. This schedule is the major part of the *Cost of Goods Sold* section of the *Profit and Loss Statement.* For management purposes the schedule must be studied most carefully, because here is where the gross profit will be made or lost. For the manufacturer the skill in manufacturing usually measures the success or the failure of the organization, rather than the skill of "buying right," which is so important to the mercantile or trading company.

The schedule *Cost of Goods Manufactured* starts with the cost of the goods which were in process partly finished at the close of the last period. To this figure must be added the first element of prime cost, materials consumed. This figure is had by another separate calculation, as follows: To the inventory of materials on hand at the start of the period is added the cost of materials purchased during the period. From this total there must be subtracted the cost of the materials on hand at the close of the period. When this figure, the cost of raw materials consumed, has been added to the old Inventory of Work in Process, it will be necessary to add in also the total amount expended for Direct Labor and the total of the *Indirect Manufacturing Expense Schedule M* above. From the total thus obtained it will then be necessary to subtract the *Inventory of Goods in Process* at the close of the period in order to determine the *Cost of Goods Manufactured* during the period, as exhibited in the principal statement under the caption *Cost of Goods Sold.*

OTHER SCHEDULES

The other schedules used in the condensed profit and loss statement are not limited to a manufacturing company but could be, and often are, used to good advantage by mercantile and trading organizations. The use of schedules in any financial statement is recommended at any time there are sufficient items to warrant their use. Had there been only two or three selling expenses, as would probably be the case if the manufacturer

disposed of his entire output through a broker or agent, then a separate schedule for selling expenses would not have been required. Similarly, if there had been several other "non-operating expense" or "non-operating income" accounts, then separate schedules might have been used there also. The use of schedules, of course, is not limited to the Profit and Loss Statement. On the Balance Sheet, schedules for such groups of accounts as *Notes Receivable, Notes Payable,* and *Investments* are quite common.

ADJUSTMENTS AND CLOSING FOR MANUFACTURERS

One of the principal differences in accounts used by the manufacturer is the several different inventories necessary as contrasted to the one inventory used by a trading concern.

The three principal inventories found in a manufacturing company are (1) The Inventory of Finished Goods, (2) The Inventory of Work in Process, and (3) The Inventory of Raw Materials. In addition, we often find Inventories for indirect manufacturing materials and supplies. All of these inventories must be taken at the close of the period and placed on the books by proper adjustment entries. In order to gather together the expenses in the several important subdivisions of the profit and loss statement, the manufacturing company will operate for convenience in closing the books several summary accounts, rather than closing all nominal accounts into the Profit and Loss Summary Account.

COST OF GOODS MANUFACTURED ACCOUNT

One of the very important summary accounts used at the end of each period when the books of a manufacturer are adjusted and closed, is the "Cost of Goods Manufactured" account. The function of this account is to gather all costs pertaining to the cost of goods manufactured. All old Inventories pertaining to manufacturing will be debited as costs, and similarly all other costs, such as purchases of raw materials, manufacturing supplies, direct labor, indirect labor, and other indirect manufacturing expenses. As all of these manufacturing costs are debited to the "Cost of Goods Manufactured" account, so also are the offsetting accounts credited to the same account. Such credits

are principally the current inventories of goods in process, raw materials, and manufacturing supplies. The net balance of the account is the *Cost of Goods Manufactured,* which in turn is transferred as a debit to the Trading Account.

TRADING ACCOUNT

This account is widely used to determine the profit on sales. The sales account is usually first closed to this account by a journal entry debiting the sales account and crediting the trading account. The cost of goods manufactured, as described above, is the principal debit or cost. The next series of debits to this account closes the usual selling expenses such as listed in the schedule of *Selling Expenses.* The old inventory of *Finished Goods* is also closed to this account as a debit to trading, and in like manner the new or current inventory of *Finished Goods* by means of an adjusting entry is registered as a credit to the trading account. The balance at this point indicates the net profit, or possibly loss, on trading, which figure is then usually closed by journal entry to the profit and loss summary account.

PROFIT AND LOSS SUMMARY ACCOUNT

After this account is opened with a credit indicating the net selling profit the usual general and administrative expenses are closed. The non-operating *Income* accounts are credited to *Profit and Loss Summary* account, while the non-operating expenses are similarly closed as debits to the *Profit and Loss Summary.* The final net result will, of course, indicate a profit or loss for the period, and will be transferred to the proprietor's capital account, or in case of a corporation to the surplus account.

DEMONSTRATION CASE

In order to unify the closing of books for a manufacturer, to demonstrate the use of a work sheet designed for a manufacturing company, and to illustrate some of the special problems in this regard we shall at this point introduce a complete demonstration problem. As a starting point we shall, of course, need a before-closing trial balance taken from the books of a manufacturing company. In order to conserve space this trial

THE JORDAN MANUFACTURING COMPANY
WORK SHEET - DECEMBER 31. 19__

ACCOUNTS	TRIAL BALANCE Debits	TRIAL BALANCE Credits	ADJUSTMENTS Debits	ADJUSTMENTS Credits	MANUFACTURING Debits	MANUFACTURING Credits
Cash	12 250 00					
Accounts Receivable	64 712 00					
Reserve for Doubtful Accts.		4 370 00				
Notes Receivable	2 614 00					
Inventory Fin. Goods Jan. 1	25 200 00					
Inventory Goods in Proc. Jan. 1	20 135 60				20 135 60	
Inventory Raw Mats. Jan. 1	12 230 00				12 220 00	
Inventory Mfg. Supplies Jan. 1	1 000 00				1 000 00	
Purch. of Mfg. Supplies	1 500 00				1 500 00	
Land	10 000 00					
Buildings	62 800 00					
Res. for Dep. Buildings		14 200 00		(11) 1 256 00		
Machinery and Equipment	45 000 00					
Res. for Dep. Mach. and Equip.		12 600 00		(10) 4 500 00		
Tools	3 605 40			(5) 2 000 00	1 605 40	
Freight Inward	640 00				640 00	
Office Equipment	2 600 00					
Res. for Dep. of Off. Equip.		360 00		(12) 130 00		
Sales		310 217 00				
Ret. Sales and Allowances	2 210 00					
Purchases Raw Materials	180 000 00				180 000 00	
Purchase Ret's and Allowances		6 200 00				6 200 00
Accounts Payable		34 715 00				
First Mtge. 6% Bonds		100 000 00				
Notes Payable		12 000 00				
Common Capital Stock		200 000 00				
Unissued Capital Stock	100 000 00					
Surplus	40 418 00					
Direct Labor	19 490 00		(6) 614 00		20 104 00	
Indirect Labor	8 420 00		(7) 210 00		8 680 00	
Factory Superintendent	5 000 00				5 000 00	
Taxes	1 000 00				600 00	
Royalties Expense	1 230 00				1 230 00	
Light, Heat and Power	3 256 00				3 006 00	
Repairs and Maint. Mach.	614 00				614 00	
Repairs and Maint. Bldgs.	244 00				244 00	
Compensation Insurance	3 200 00			(9) 1 237 00	1 963 00	
Salesmen's Salaries	21 800 00					
Salesmen's Commissions	6 200 00					
Advertising	4 000 00			(8) 260 00		
Delivery Expense	3 620 00					
Freight Outward	8 0 00					
Sales Office Salaries	3 600 00					
Officers' Salaries	12 000 00					
Office Salaries	4 600 00					
Telephone and Telegraph	874 00					
Office Supplies	814 00					
General Insurance	700 00					
Bond Interest	6 000 00					
Interest Expense	420 00		(13) 360 00			
Sales Discounts	2 480 00					
Purchase Discounts		1 020 00				
Rental Income		960 00				
Interest Earned		120 00		(14) 78 00		
	696 762 00	696 762 00				
NEW ACCOUNTS						
INVENTORIES Dec. 31.						
Finished Goods			(1)			
Work in Process			(2)			(2) 24 603 00
Raw Materials			(3)			(3) 14 712 00
Manufacturing Supplies			(4)			(4) 1 300 00
Tools Inventory			(5) 2 000 00			
Accrued Wages			(6-7)	(6-7) 824 00		
Prepaid Advertising			(8) 260 00			
Prepaid Comp. Ins.			(9) 1 237 00			
DEPRECIATION OF						
Mach. and Equip.			(10) 4 500 00		4 500 00	
Buildings			(11) 1 256 00		1 256 00	
Office Equipment			(12) 130 00			
Acc'd Interest Payable				(13) 360 00		
Acc'd Interest Receivable			(14) 78 00			
						48 815 00
			10 645 00	10 645 00		(15) 217 443 00
					264 258 00	264 258 00

balance taken from the books of the Jordan Manufacturing Company, Inc., has been written on the working sheet above. It is assumed that the following adjustments are required:

a. The Inventories at December 31, 19— were as follows:

Finished Goods	$26,090.00
Work in Process	24,603.00
Raw Materials	14,712.00
Miscellaneous Mfg. Supplies	1,300.00
Tools	2,000.00

Trading		Administrative and Non-Operating		Balance Sheet	
Debits	Credits	Debits	Credits	Assets	Liabilities, Cap. Reserves
				12 250 00	
				64 712 00	
					4 370 00
				2 614 00	
25 200 00					
				10 000 00	
				62 800 00	
					15 456 00
				45 000 00	
					17 100 00
				2 600 00	
					490 00
	310 217 00				
2 210 00					
					34 715 00
					100 000 00
					12 000 00
					200 000 00
				100 000 00	
				40 413 00	
		400 00			
		250 00			
21 800 00					
6 200 00					
3 740 00					
3 620 00					
810 00					
3 600 00					
		12 000 00			
		4 600 00			
		374 00			
		814 00			
		700 00			
		6 000 00			
		780 00			
		2 460 00			
			1 020 00		
			960 00		
			198 00		
	(1) 26 090 00			(1) 26 090 00	
				(2) 24 603 00	
				(3) 14 712 00	
				(4) 1 300 00	
				(5) 2 000 00	
					824 00
				(8) 260 00	
				(9) 1 237 00	
		130 00			
					360 00
				78 00	
(15) 217 443 00					
(16) 51 684 00			(16) 51 684 00		
336 307 00	336 307 00				
	Net Profit	(17) 25 354 00			(17) 25 354 00
		53 862 00	53 862 00	410 669 00	410 669 00

b. Accrued Salaries:
- Direct labor .... $ 614.00
- Indirect labor 210.00

c. *Taxes* to be apportioned 60% to the factory and 40% to the general and administrative expense.

The light, heat, and power account has been analyzed and $250.00 should be charged as a general expense, the balance to the factory.

d. Deferred Expenses:
- Prepaid Advertising .... $ 260.00
- Prepaid Compensation Insurance 1,237.00

e. Depreciation is to be calculated as follows:
Machinery & Equipment 10% per annum.
Buildings 2% per annum.
Office Equipment 5% per annum.

f. Interest is to be accrued on Notes Payable amounts to \$360.00; on Notes Receivable \$78.00.

WORK SHEET FOR A MANUFACTURER

The accompanying work sheet has been designed to make easy the closing of the books by progressive steps and the preparation of the Profit and Loss Statement, and necessary principal supporting schedules.

The student will note from a study of this form that the trial balance after adjustment has been omitted. The next three pairs of columns have been provided to break down the nominal accounts into appropriate subdivisions of income and expense. The last two columns are used as before to receive the Balance Sheet accounts. The use of this Work Sheet can best be understood by tracing out some of the adjustment entries and studying the placing of the nominal accounts in their respective subdivisions. In order to facilitate a study of the adjustment entries, each has been numbered. The first adjustment sets up the new Inventory of "Finished Goods" as an asset, and as an offsetting credit to the Trading division. Note that the inventory amounts are not written into the adjustments space; this is to conserve time.

The second, third, and fourth adjustments, beside setting up the asset value of these inventories, are, similarly, placed directly to the credit of the *Manufacturing* section account.

The fifth adjustment is written in the adjustment columns, the debit representing the *Tools Inventory* or good tools on hand, which balance is, in turn, deducted from the *Tools* account, which in our demonstration represents the cost of tools used in manufacturing. The balance of the adjustments six to fourteen inclusive are self-explanatory. The distribution of the accounts should be studied but needs no particular explanation. When the columns have been added, the " adjustments " columns will, of course, balance if the entries have been written correctly. The Manufacturing section columns, when added, will of course have a predominant debit balance, indicating the

Cost to Manufacture. This amount is transferred by entry No. 15 on the work sheet a debit to the *Trading* section and a credit to the *Manufacturing* section, thereby balancing the *Manufacturing* columns. Similarly, the next entry No. 16 transfers the gross profit on *Trading* to the *Profit and Loss* columns. When the *Profit and Loss* columns have been added, the net profit or loss will be indicated. In our present problem there is a net profit of $25,354.00. This profit is, of course, also indicated in the balance sheet columns.

From a work sheet, such as the one illustrated, the preparation of a profit and loss statement is a comparatively simple matter. The accounts making up the *Cost to Manufacture* schedule are taken from the *Manufacturing* section of the work sheet. The *Trading* section of the work sheet provides the accounts for the *Selling Expenses* schedule and also the principal sources of income. The *Profit and Loss* section provides the accounts for the *General and Administrative Expense* schedule, also the non-operating expense and non-operating income acccounts.

CLOSING ENTRIES

After the work sheet has been prepared, and the financial statements presented to the management, the bookkeepers must turn themselves to the task of closing the books. In order to make our illustration complete the adjusting and closing entries are now presented.

General Journal

Adjusting Entries

–1–				
Inventory Finished Goods Dec. 31	26,090	00		
Trading Account			26,090	00
To set up the asset value of the current inventory of finished goods, and to reduce the cost of trading.				
–2–				
Inventory Work in Process Dec. 31	24,603	00		
Inventory Raw Materials Dec. 31	14,712	00		
Inventory Manufacturing Supplies Dec. 31	1,300	00		
Manufacturing Account			40,615	00
To set up the asset value of current manufacturing inventories and to reduce the cost to manufacture.				

-3-		
Tools Inventory Dec. 31	2,000.00	
Tools		2,000.00
To set up the asset value of tools on hand, and reduce the tools expense account.		
-4-		
Direct Labor	614.00	
Indirect Labor	210.00	
Accrued Wages		824.00
To set up accrued wages.		
-5-		
Prepaid Advertising	260.00	
Advertising		260.00
To defer the prepaid advertising.		
-6-		
Prepaid Compensation Insurance	1,237.00	
Compensation Insurance		1,237.00
To defer the prepaid compensation insurance.		
-7-		
Depreciation of Machinery and Equipment	4,500.00	
Reserve for Dep. of Mach. and Equip.		4,500.00
10% annual rate.		
-8-		
Depreciation of Buildings	1,256.00	
Reserve for Dep. of Buildings		1,256.00
2% annual rate.		
-9-		
Depreciation of Office Equipment	130.00	
Reserve for Dep. of Office Equipment		130.00
5% annual rate.		
-10-		
Interest Expense	360.00	
Accrued Interest Payable		360.00
To accrue interest on Notes Payable.		
-11-		
Accrued Interest Receivable	78.00	
Interest Earned		78.00
To accrue interest earned on Notes Receivable		
Closing Entries		
-1-		
Manufacturing Account:	264,258.00	
Goods in Process Jan. 1		20,135.60
Raw Materials Jan. 1		12,230.00
Manufacturing Supplies Jan. 1		1,000.00
Purchases of Manufacturing Supp.		1,500.00
Tools Expense		1,605.40
Freight Inward		640.00
Purchases of Raw Materials		180,000.00

	Debit	Credit
Direct Labor		20,104.00
Indirect Labor		8,630.00
Factory Superintendent		5,000.00
Factory Taxes		600.00
Royalties Expense		1,230.00
Light, Heat & Power (factory)		3,006.00
Repairs & Maintenance Mach'y		614.00
Repairs & Maintenance Bldgs.		244.00
Compensation Insurance		1,963.00
Depr. of Machinery & Equip.		4,500.00
Depreciation of Buildings		1,256.00
To close all manufacturing expense to the Manufacturing Account.		
–2–		
Purchase Returns and Allowances	6,200.00	
Manufacturing Account		6,200.00
To reduce the manufacturing cost by the amount of Purchase Returns and allowances.		
–3–		
Trading Account	217,443.00	
Manufacturing Account		217,443.00
To charge Trading with the Cost of Manufacturing, closing the latter account.		
–4–		
Trading Account:	67,180.00	
Inventory of Finished Goods Jan. 1		25,200.00
Sales Returns and Allowances		2,210.00
Salesmen's Salaries		21,800.00
Salesmen's Commissions		6,200.00
Advertising		3,740.00
Delivery Expense		3,620.00
Freight Outward		810.00
Sales Office Salaries		3,600.00
To charge the Trading Account with the beginning inventory of finished goods and the several selling expenses.		
–5–		
Sales	310,217.00	
Trading Account		310,217.00
To close the sales for the year to the Trading Account.		
–6–		
Trading Account	51,684.00	
Profit and Loss Summary		51,684.00
To transfer to the Profit and Loss account the net profit on selling.		
–7–		
Profit and Loss Summary:	28,508.00	
Taxes (General)		400.00
Light, Heat, and Power (General)		250.00
Officers' Salaries		12,000.00
Office Salaries		4,600.00
Telephone and Telegraph		374.00
Office Supplies		814.00
General Insurance		700.00

Bond Interest		6,000.00
Interest Expense		780.00
Sales Discounts		2,460.00
Dep. of Office Equipment		130.00
To close the several general, administrative, and non-operating expenses to the Profit and Loss account.		
-8-		
Purchase Discounts	1,020.00	
Rental Income	960.00	
Interest Earned	198.00	
Profit and Loss Summary		2,178.00
To close the non-operating income to Profit and Loss.		
-9-		
Profit and Loss Summary	25,354.00	
Surplus		25,354.00
To close the net profit for the year from Profit and Loss to Surplus.		

ADJUSTING AND CLOSING ENTRIES POSTED

After the adjusting and closing entries have been posted, all of the nominal accounts will have been closed. The following accounts are now exhibited so that the student may visualize the effect of the adjustment and closing entries.

MANUFACTURING ACCOUNT

Closing Entry No. (1)	264,258.00	Adjustment No. (2)	40,615.00
		Closing Entry No. (2)	6,200.00
		Closing Entry No. (3)	217,443.00
	264,258.00		264,258.00

TRADING ACCOUNT

Closing Entry (3)	217,443.00	Adjustment No. (1)	26,090.00
Closing Entry (4)	67,180.00	Closing Entry No. (5)	310,217.00
Closing Entry (6)	51,684.00		
	336,307.00		336,307.00

PROFIT AND LOSS SUMMARY

Closing Entry (7)	28,508.00	Closing Entry (6)	51,684.00
Closing Entry (9)	25,354.00	Closing Entry (8)	2,178.00
	53,862.00		53,862.00

CONCLUSION

A great deal more could be said about the peculiar problems of cost accounting for the manufacturer, but that shall be left

for a separate course of study, as indicated in an early part of this chapter. It is hoped, however, that the student will appreciate the material presented and perhaps visualize some of the problems which abound in the interesting field of Cost Accounting.

QUESTIONS ON THE CHAPTER

1. Name and give a brief description of the three elements of manufacturing cost.
2. Draft a skeleton profit and loss statement in condensed form.
3. Explain the purpose and the use of three schedules which might be used.
4. Draft a skeleton form for *Cost of Goods Manufactured.*
5. What do you understand by *factory overhead?*
6. Name and describe the use of four inventory accounts likely to be found on the books of a manufacturer.
7. Explain how these Inventories — Old and New — are debited and credited to the several sections of the Profit and Loss account.
8. Explain the function of three accounts used in the progressive steps required to close the books of a manufacturer.
9. (*a*) Name the columns used on a work sheet designed for a manufacturer.
   (*b*) Explain the function of each of the several pairs of columns.
10. (*a*) List ten accounts which might be listed as debits to the manufacturing section of the work sheet.
    (*b*) List the principal credits to this section.
    (*c*) What does the balance represent?

PROBLEM MATERIAL

Problem 1

The Simplex Machine Parts Co. Inc., who have been manufacturing automobile parts for several years, close their books semi-annually. The following is a trial balance taken from the general books of the Company at October 31, 19—.

Purchase Raw Materials	$183,600.00	
Sales Discounts	6,412.00	
Indirect Materials May 1	1,200.00	
Purchase Discounts		$ 3,620.00
Purchase Returns		6,220.00
Shipping & Receiving Expense	3,260.00	
Direct Labor	22,060.00	
Indirect Labor	8,645.00	
General Office Salaries	8,050.40	
Factory Executive Salaries	7,000.00	
Sales		320,460.00
Return Sales	2,240.00	
Freight & Cartage	2,500.00	
Containers, Cartons & Boxes	2,310.00	
Purchases Indirect Materials	1,700.00	
Salesmen's Salaries	11,800.00	
Salesmen's Commissions	3,060.00	
Electric Service	2,012.00	
Repairs & Maintenance of Machinery	3,400.00	
Tools	3,200.00	
Machinery & Equipment	60,000.00	
Factory Buildings	52,000.00	
Office Building	10,000.00	
Land & Plant Site	12,000.00	
Accounts Receivable	64,260.00	
Vouchers Payable		82,420.00
Cash	42,497.60	
Interest Expense	348.00	
Notes Payable		8,000.00
Reserve for Doubtful Accounts		630.00
Reserve for Dep. of Buildings		6,270.00
Reserve for Dep. of Mach. & Equip.		18,600.00
Advertising	12,000.00	
Insurance	840.00	
Officers' Salaries	12,000.00	
Inventory Raw Materials May 1	15,230.00	
Inventory Unfinished Parts May 1	22,415.00	
Inventory Finished Parts May 1	28,600.00	
Unissued Capital Stock	75,000.00	
Authorized Capital Stock		200,000.00
Surplus		33,420.00
	$679,640.00	$679,640.00

Adjustment Data:

October 31 Inventories are as follows:

1. Raw Materials $21,410.00.
2. Unfinished Parts $23,690.00.
3. Finished Parts $32,500.00
4. Indirect Materials $1500.00.
5. Tools Inventory $2600.00.
6. The Company is indebted to the Sterling Motor Co. $1500.00 for Royalties, for patented parts manufactured during the current period, but which have not been recorded on the books.
7. Depreciation of Buildings (Factory and Office) 2% per annum.
8. Depreciation of Machinery 10% per annum.
9. Salesmen's Salaries are to be accrued $510.00.
10. Salesmen have earned in commissions $1020.00 which have not been recorded.
11. General Office Salaries are to be accrued $605.00.
12. There is Unexpired Advertising valued at $2000.00
13. The Containers, Cartons, and Boxes account has been analyzed and it is found that $460.00 was spent for original containers, and the balance for shipping cartons and boxes.
14. The Insurance Account should be charged $310.00 to the Factory, the balance to General Expense.
15. The Freight and Cartage Account has been analyzed $1240.00 Inward Freight and $1260.00 Outward Freight.
16. The Shipping and Receiving Dept. Expense has been analyzed $360.00 for receiving while $2900.00 is to be charged for outward shipments.
17. The Electric Service is to be apportioned $1940.00 to Factory, balance to General.
18. The Reserve for Doubtful Accounts is to be increased by 1% of Accounts Receivable.

Required:

(1) Prepare an accountant's work sheet.

(2) Prepare a condensed profit and loss statement, with schedules for *Cost of Finished Parts, Manufacturing Expenses, Selling Expenses,* and *General Administrative Expense.*

(3) A balance sheet.

(4) Journal entries required to adjust and close the books.

(5) Post ledger accounts for *Cost to Manufacture, Trading,* and the *Profit and Loss Summary.*

CHAPTER XXI

THE VOUCHER SYSTEM

NEED FOR THE VOUCHER SYSTEM

In a small organization the proprietor may be able to supervise personally all the details of his business including all accounting matters, but in larger organizations a great deal of the authority must be delegated to assistants. The accounting authority may be in the hands of a treasurer, one of the officers of a corporation. He, in turn, may engage a controller to supervise the entire accounting. The controller may delegate the several phases of his work to junior executives. A general auditor may be appointed by the treasurer or controller to audit or keep a continual check on the accounting system which will provide a double check on all important accounting procedure. Such a system, requiring two or more individuals to handle the same items or to pass on, check, or approve the procedure, is known as a system of internal check.

System building is one of the most interesting fields of accounting. Standard forms such as those illustrated in our chapters on special journals are quite satisfactory in theory and may be found in use by business organizations in similar or modified form. However, while each of the forms illustrated is a perfect general form, frequently in practice many modifications of these forms will be found necessary, and it is not infrequent that a student starting to work in an accounting department will meet forms which may be rather strange to him. This is because some accountant has designed a book or system which will best fit the needs of the particular organization. Custom-built systems are usually much more efficient because they are planned to fit the needs of the particular business. System builders always strive to create a system that will yield the maximum of information with the minimum of effort. In this chapter one or two of the special books employed by system builders will be presented in a study of the modern voucher system.

VOUCHER SYSTEM DEFINED

The title *Voucher System* might indicate a complete accounting system different from the general system of accounts studied so far. This is not entirely true, because the voucher system replaces only certain books in the system, principally the Purchase Journal, and the Accounts Payable Ledger. The Cash Disbursements Journal will be simplified, but the other books, including the General Ledger, will continue practically unchanged.

A Voucher Register, a new special journal, together with a new procedure for verifying, recording, and filing of " vouchers " and a new procedure for " vouching " all cash payments, are the principal changes to be introduced in a study of the voucher system.

VOUCHER DEFINED

A definition of " voucher " taken from a standard dictionary is as follows: " An instrument which attests, warrants, maintains, or bears witness; a document which serves to vouch the truth of an account." This definition is quite satisfactory and accurately defines a voucher. In the voucher system a voucher is prepared for every purchase of material, merchandise, assets, or services. With the voucher system in operation, all payments will be made by voucher check except, of course, petty cash disbursements which will be handled as always.

VOUCHER DESCRIBED

Sometimes the instrument is drawn as a separate, complete instrument. The " inside " or " face " of the voucher is then ruled but otherwise left blank for typing the details of the purchase. The reverse or " outside " of the voucher is printed in such a way that, when folded, the summary and distribution information will appear in readily usable form as an aid to the bookkeeper in entering the voucher in the register. Sometimes this form will be printed only on the " outside," the inside being blank. In this case the form is spoken of as the voucher jacket. When a voucher jacket is used the original invoice is fastened on the inside of the jacket and makes a very good

voucher. If there is no invoice, as in the case of a voucher drawn for pay-roll, then a description of the disbursement is typed on the inside of the voucher jacket if the outside summary is not sufficient.

VOUCHER JACKET ILLUSTRATED

The voucher jacket is usually a blank sheet of paper of approximate letter size, $8\frac{1}{2}$ by 11 inches. This is then printed on just one-half the sheet, as indicated in the following illustration, so that after the voucher is fastened inside the jacket and folded for vertical filing, the printed matter will be on the outside of the jacket.

An experienced voucher clerk prepares the vouchers from invoices previously approved and checked as to quantity, quality, and price in accordance with the purchase order. The information appearing on the outside of the jacket is taken from the invoice so approved.

In the voucher system each voucher jacket bears a registered number, and each line in the voucher register likewise is registered. If for any reason a voucher has to be canceled, then the voucher jacket is plainly marked *canceled* and the line bearing the canceled number will be left blank, or the word *canceled* written in. The voucher so canceled is then filed in a compartment available for auditing purposes. The information printed on the following form is merely typical of what might appear on the voucher jacket. The accounts to be charged correspond with the account distribution in the voucher register, and of course may contain a great many more accounts. Sometimes, instead of printing a long list of accounts which may be charged, space is simply provided for " writing in " the particular account to be debited, and this account title will be written in by the voucher clerk instead of checking a printed account title as in the illustration. The inside of the voucher is quite frequently left blank, because the original invoice from the seller fastened to the jacket gives the best record of the item to be paid by the voucher.

The invoices which go into the voucher, as described before, are usually first checked with the purchase order. It is also the duty of the voucher clerk to see that all initials are in order,

MODERN MANUFACTURING CO.

Vo. No. 1

Date Jan. 2, 19__

To:

Strong Hardware Co.

245 Central Ave.

New Brunswick, N. J.

Total of Invoice $100.00

Terms 2/10 n/30

Discount $2.00

Net Amount Payable $98.00

Due Date Jan. 12

Paid: Date Jan. 10 Check No. 286

Distribution

Accounts to be Charged	Amount	
Purchases-Raw Materials		
Freight Inward		
Direct Labor		
Purchases-Indirect-Supplies	100	00
General Office Pay-Roll		
Sales Dept. Salaries		
Advertising		
Delivery Expense		
Rent		
Insurance-General		
Insurance-Factory		
Light, Heat, Power		
General Expense		
Sundry-Account		

Approved F.E.L.

Entered J.M.B.

approving quantity, price, and so forth before he accepts the invoice and prepares the voucher for entry and payment.

If the voucher is being prepared to pay for a service, rather than an invoice, such as pay-roll, then the pertinent information relative to the pay-roll being paid by the voucher will be typed on the inside of the voucher and take the place of an invoice.

As the vouchers are thus completed, they are turned over to the bookkeeper for entry in the voucher register.

VOUCHER REGISTER ILLUSTRATED

The following voucher register form is presented to illustrate principles and possibilities of the voucher system, rather than as an ideal form to be used by any particular business.

The form is printed in loose leaf to meet the needs of a particular company. As the name of the book indicates, it is a register; that is, each line bears a registered number to correspond with the voucher, and if the system is operated properly each voucher will be entered on its own line, as previously explained.

Because the voucher gives so much detail regarding the item, there is no need to write in any explanation. The voucher number is reference enough, and, should an interested person care to study any particulars, he can easily locate the voucher by number and examine it.

The first money column headed *Accounts Payable* is reserved for the voucher total. The sum of this column is posted at the end of the month to the credit of the Accounts Payable Controlling Account in the general ledger. All the remaining money columns to the right are reserved for the distribution of the items involved, as indicated on the voucher jacket. Each of the distribution columns is a debit column and represents an account kept in the general ledger. Perhaps a good way to understand the book and its operation will be to trace out the entry of a few vouchers.

Voucher 1, taken from the voucher jacket illustrated, indicates a purchase of $100.00 worth of Indirect Supplies from the Strong Hardware Company. The total is entered in the Accounts Payable column, and the amount extended to the *Pur-*

VOUCHER REGISTER

Month Of January 19__

DEBITS

VO. NO.	DATE		ACCOUNT TO BE CREDITED		ACCOUNTS PAYABLE TOTAL-AMT CR.	PURCHASES RAW MATS. DR.	FREIGHT INWARD DR.	DIRECT LABOR PAY ROLL DR.	INDIRECT LABOR DR.	PURCHASES INDIRECT SUPPLIES	GENERAL OFFICE PAY ROLL	SALES DEPT. SALARIES	ADVER-TISING	DELIVERY EXPENSE	RENT	INSURANCE GENERAL	INSURANCE FACTORY	LIGHT HEAT POWER	GENERAL EXPENSE	SUNDRY ACCOUNT TITLE	FOLIO	SUNDRY AMOUNT
1	Jan	2	Strong Hardware Co.		100 00					100 00												
2		3	Globe Office Supplies		125 00															Office Equipment	(41)	125 00
3		4	National Steel Co.		1 250 00	1 250 00																
4		4	Pennsylvania R.R. Co.		168 00		168 00															
5		4	Pay-Roll		2 708 00			1 810 00	418 00		300 00	180 00										
6		7	Rutgers Auto Exchange		950 00															Del. Equipment	(11)	950 00
7		7	Central Insurance Agency		496 00											96 00	400 00					
8		7	Public Service Elec. & Gas Co.		240 00													180 00	60 00			
9		8	Standard Gasoline Co.		24 00									24 00								
					23 097 00	6 500 00	492 00	7 480 00	1 725 00	294 00	1 400 00	720 00	410 00	120 00	200 00	96 00	400 00	314 00	270 00			2 676 00
					(4)	(74)	(75)	(101)	(102)	(76)	(201)	(301)	(304)	(302)	(202)	(206)	(77)	(78)	(209)			(✓)

chases Indirect Supplies column. Voucher 2 is for the purchase of some sort of " Office Equipment " — the invoice attached to the voucher would indicate the exact item. Because the account " Office Equipment " has not been given a special column, it is entered as one of the *Sundry Accounts.* Special columns are provided for the convenience of posting accounts which are used frequently, whereas accounts which are used seldom are entered in the *Sundry Account* space and the amount in the sundry money column, from where it is posted to the general ledger. Voucher 3 is for a purchase of Raw Materials, and will be treated the same as voucher 1. The fourth voucher represents an invoice from the Pennsylvania Railroad for freight charges, perhaps on the shipment of Raw Materials above. Very frequently an express or freight bill will be attached to the bill of lading, and will have to be paid in cash unless the company has established a credit rating with the carrier, as is assumed here. Voucher 5 is a pay-roll voucher. Typed on the inside of this voucher would be a brief description of the several pay-rolls being charged. The summary by departments is then indicated on the outside of the jacket for posting information. The regular pay-roll books would, of course, be maintained, and therefore only a brief summary need be indicated in the voucher. The sixth voucher indicates the purchase of an automobile delivery truck. Note that the *Delivery Equipment* account is listed among the sundry accounts. The seventh voucher evidently covers two policies, one chargeable to general insurance, and the other to factory insurance The Public Service Light and Power Company, voucher No. 8 no doubt represents $180.00 electric power chargeable to th factory, while 60.00 is classified as a general expense, perhap for lights. The last voucher listed, No. 9, is no doubt for Ga and Oil used in the delivery truck, and therefore chargeable t *Delivery Expense.*

SUMMARY POSTING AT THE END OF THE MONTH

At the end of the month the totals of each column are poste to the respective accounts in the General Ledger. The Sundı Amount column has been posted to the individual accounts ar

is therefore checked. The Accounts Payable credit posting offsets the series of total debit postings, the total of which should exactly equal the total credited to the *Accounts Payable Controlling* account.

FILING THE VOUCHERS

Several methods of filing vouchers are in use. One system very widely used maintains just two filing cabinets. One is for "Unpaid Vouchers" and the other for "Paid Vouchers." As soon as a voucher is entered in the register, it is filed with the Unpaid Vouchers, where it will remain until paid, after which it will be filed with the Paid Vouchers. In this manner the Accounts Payable Ledger is eliminated. The *Accounts Payable Controlling* account will indicate the total due to creditors. The total of all unpaid vouchers taken from the "Unpaid Voucher" file should equal this amount. This elimination of the subsidiary creditors ledger and the numerous postings to the individual creditor's accounts is one of the important labor-saving advantages of the voucher system.

Some accountants, however, like to maintain summary records with each creditor. This is easily accomplished by the addition of a file for creditors. A card is made out once for each creditor and may be ruled as follows:

STRONG HARDWARE COMPANY 245 Central Ave. New Brunswick, N. J.					
Payment Reference			Vouchers Payable		
Date	Vo. No.	Amt.	Date	Vo. No.	Amt.
			Jan. 2	1	100.00

The use of such a card file simply replaces the Accounts Payable Ledger, and requires just about the same amount of time and labor to operate.

PAYMENT OF VOUCHERS

THE VOUCHER CHECK

As vouchers are to be paid, they are taken from the Unpaid Vouchers file and checks drawn for the proper amounts. The voucher system usually includes the use of voucher checks. A voucher check is one prepared to indicate definitely the items being paid by the check, and containing some statement as follows: " Acceptance of this check acknowledges payment in

CHECK IS IN PAYMENT OF FOLLOWING ITEMS

DATE	AMOUNT

CORRECT ENDORSEMENT IS RECEIPT

THE MODERN MANUFACTURING CO. No. 495

NEW BRUNSWICK, N. J. ____________ 19____

PAY TO THE ORDER OF ____________ $______

______________________________ DOLLARS

TO

THE NATIONAL BANK OF NEW JERSEY

55-179 NEW BRUNSWICK, N. J.

THE MODERN MANUFACTURING CO. No. 495

New Brunswick, N. J. ____________ 19____

Pay to Order Of ____________ $______

______________________________ DOLLARS

TO: THE NATIONAL BANK OF NEW JERSEY

New Brunswick, N. J.

THE MODERN MANUFACTURING CO.
By Treas.

- -

Please Detach Before Depositing

Acceptance of this check acknowledges payment in full of the below listed items.

No other receipt is required.

If any error occurs please return the check with your advice.

Date	Item	Total	Discount	Check Amt.

full of the following items and no other receipt is required. In case of error please return the check with your advice."

This is followed by a brief summary of the payment, as in the two illustrated types of voucher checks.

THE CHECK REGISTER

With the voucher system in operation the Check Register, or cash payments journal, becomes a very simple form, such as the following:

CHECK REGISTER

Date	Payee	Ck. No.	Voucher Number	F	Vouchers Payable Debit	Purch. Disct. Cr.	Net Cash Cr.

Since the voucher register records a voucher for every disbursement, except for petty cash payments, the check register is simply a cash record of voucher payments. The only postings from the check register illustrated are the column totals. The first money column is posted to the debit of the *Accounts Payable Controlling* account, and is offset by two credit postings, one to *Purchase Discounts* and the other to *Cash* for the net amount disbursed.

VOUCHERS REQUIRING IMMEDIATE PAYMENT

Sometimes an item must be paid immediately. In such a case the procedure will be the same as where time elapses between the drawing of the voucher and its payment, except that the voucher will not, of course, be filed with the unpaid vouchers. As a matter of speeding up the transaction, often the check will be drawn first, and the authenticating voucher drawn immediately following, as would be the case if someone were waiting for a check. In such a case a voucher number would be assigned to the payment and written on the voucher part of the check. An illustration of this might be a check drawn to an express company where the amount is too large for a petty cash disbursement. A disbursement for pay-roll calls

for an immediate payment of cash, but here the usual procedure is followed. The voucher is drawn, approved for payment, recorded in the voucher register, where the several departments are debited and the accounts payable controlling account credited. The check is drawn and entered in the check register, resulting in a debit to the accounts payable controlling account and a credit to cash. The payment notation is then entered in the space provided on the face of the voucher jacket and the voucher placed in the " Paid Vouchers " file. In each case the net result is the same, a debit to an expense account and a credit to cash, even though two books were required in each instance.

PROCEDURE FOR PURCHASE RETURNS AND ALLOWANCES

If returns are made from a shipment before the voucher is prepared, particularly if the return has been allowed, then the amount of the return will be simply deducted from the face of the invoice and the voucher prepared for the net sum. If a credit memo is received for returns or allowances after the voucher has been prepared and entered, then a journal entry will have to be written in the general journal, as follows:

GENERAL JOURNAL

National Steel Company	$200.00	
Purchase Returns		$200.00
Received a credit memo for materials returned not as per specifications.		

If the voucher has been entered but not yet paid, then the voucher will be paid less the credit memo, the credit memo simply being fastened in the correct voucher and the amount deducted. If, on the other hand, the voucher has been entered and paid, a *Voucher Debit Memo,* printed on pink or other colored paper, is prepared and held for deduction from the next voucher prepared for the same company. In the meantime the debit will be posted to the *Accounts Payable Controlling* account, should the month close before another purchase is made from the same company. This will have the effect of carrying a creditor's account with a debit balance, and where the amount involved is not considerable it should cause no criticism. Should

no further purchases be made from the creditor, a check will be requested, and, when received, will be debited to *Cash* and credited to *Accounts Payable Controlling* account, thus balancing the transaction.

PROCEDURE INVOLVING NOTES PAYABLE

Suppose the company borrows $2000.00 from the bank for sixty days. At the time the loan is granted, a journal entry will be written in the usual way. Debiting *Cash* for $1980.00 the net amount credited by the bank, *Interest Expense* may be debited for the other $20.00, while *Notes Payable* is credited with $2000.00. When payment becomes due, because all payments are made by voucher, a voucher is drawn and entered in the voucher register, resulting temporarily in a debit to *Notes Payable* (through the *Sundries* column) and a credit to *Vouchers Payable*. (The *Vouchers Payable* account is purposely used in this illustration, in place of the *Accounts Payable Controlling* account which has been used in all previous illustrations, so that the beginning student might see that these accounts represent exactly the same thing and may, therefore, be used interchangeably.) The voucher is immediately paid through the check register, resulting in a debit to *Vouchers Payable* and a credit to *Cash*. This may seem like a rather involved procedure, but really is very simple.

Should a voucher already on the books be paid by the issuance of a note payable, a journal entry may be written in the general journal debiting *Vouchers Payable*, and crediting *Notes Payable*. If space has been provided in the voucher register for payment data, as will be explained presently, then in this space a note may be written, indicating that this voucher has been paid and giving a cross reference to the journal entry. When the note is paid at maturity, the same procedure should be followed as outlined above when the bank note became due.

PROCEDURE FOR PARTIAL PAYMENT

If, when an invoice is received, the seller agrees to accept several partial payments, several vouchers should be prepared, and each voucher paid as it matures, involving no other special procedure. If partial payments are agreed upon after the original voucher has been entered, then the original voucher

may be canceled and two new vouchers prepared, one for the amount to be paid, and the other for the deferred balance. For example, suppose Voucher 6 in favor of the Rutgers Auto Exchange due February 7th is to be paid $500.00 February 7th and the balance $450.00 March 7th. The easiest procedure will be to draw two new vouchers, say Nos. 55 and 56. The payee, in each instance, will be Rutgers Auto Exchange, and the amounts will be entered in the *Accounts Payable* credit column and the debits will also be entered in the *Accounts Payable Controlling* account, in the Sundry Accounts space. In this manner the credit from Voucher 6 is balanced off or canceled, while the two new credits are recorded. In the space provided for payment data a notation " see Vouchers 55 and 56 " will show clearly the disposition of the first voucher. The two new vouchers will, of course, explain that they are in payment of the old voucher. Such a situation should not be met with frequently, for this practice indicates a poor current financial condition.

THE VOUCHERS CONTROLLING ACCOUNT

When the voucher system is in operation, frequently the *Accounts Payable Controlling* account will be given the title *Vouchers Payable Controlling* account as indicated in one of the previous illustrations. Either title is satisfactory, but the writer can see no advantage in changing the name from *Accounts Payable Controlling* to *Vouchers Payable Controlling*. The entries in the control account will appear as follows:

ACCOUNTS PAYABLE CONTROLLING ACCOUNT

Jan. 31	Cash Paid to Creditors from Check Register	xxx	Jan. 1	Balance brought down	xxx
	General Journal	xxx	Jan. 31	Total Vouchers Payable from Voucher Register	xxxx
	From "Sundry" Accounts column Voucher Register (for canceled vouchers, etc.)	xxx			
		xxxx			xxxx
			Feb. 1	Balance	xxx

The student will note that the debits and credits to this account are just about the same as formerly written in the *Ac-*

counts Payable Controlling account. The principal credit now comes from the voucher register instead of from the purchase journal. The principal debit comes from the check register instead of a special column of the cash disbursements journal. The general journal is utilized very much the same as always, and is used to record notes given to creditors and for purchase returns and allowances, as previously explained.

OTHER FORMS OF VOUCHER REGISTER

As was stated at the start of this chapter, voucher systems are frequently custom-made, that is, drawn to meet particular needs. The one form of voucher register illustrated would perhaps serve the needs of a small manufacturer. The voucher system, while very widely used by manufacturers as a part of a cost system, is by no means limited to manufacturing concerns. Mercantile organizations very frequently employ the voucher system; for instance, a small department store might class its sales by departments and at the same time wish its purchases segregated similarly. The voucher system could be easily set up somewhat as follows: In the illustration below only the *Accounts Payable* total credit column is shown, together with an idea of how the several department purchases could be set up.

VOUCHER REGISTER						
Accounts Payable Credit	Purchases Dept. A	Purchases Dept. B	Purchases Dept. C	Purchases Dept. D	Purchases Dept. E	ETC.
	Debit	Debit	Debit	Debit	Debit	

The balance of the distribution columns would be similar to those in the former illustration, containing the several selling expenses, general and administrative expenses. There is no limit to the classification of accounts which can be displayed in a well-drafted voucher register.

The writer well remembers one voucher record which pro-

vided space for some one hundred and twenty-eight columns, used by a moving picture producer to keep the cost of producing films. The book itself when closed was only three feet wide, but when opened was six feet from end to end. A yard stick was used to be certain that the debit distribution was being made on the same line on the extreme right as the accounts payable total appeared on the extreme left. Each single page had thirty-two columns, and in order to provide sufficient columns for the expense distribution desired, a fly leaf with thirty-two columns front and thirty-two back was provided, making in all some one hundred and twenty-eight columns available. The several expenses the producers were interested in keeping separate were each given column headings, such as "Stars' Salaries," "Extra Help," "Directors' Salaries," "Camera Men," "Electricians," "Stage Carpenters," "Scenery Decorators." These are just a few of the salary accounts maintained, and they were followed by a long series of other interesting titles such as "Location Rentals," "Wardrobe Hire," "Prop Rentals," and so forth. The records were kept in such a way that the cost of each picture was kept separately, and when the producers studied the costs, which frequently ran close to the million dollar mark, they could see a uniform treatment of every cent expended on the different pictures produced.

Another special form of voucher register is one which combines the voucher register and the check register somewhat as the one which follows:

Date Paid	Voucher Check No.	Debit	Credit		Payee
		Vouchers Payable	Purch.. Discount	Net Cash	

Voucher No.	Vouchers Payable Credit	Debit Distribution				E T C.

The form above combines the voucher register and the check register. As each voucher is paid, the payment data on the extreme left are filled in; and, gradually, as the vouchers are paid,

the page is filled out; and usually only the more recent vouchers stand out as unpaid. In this manner it is very easy to check the unpaid vouchers with the voucher register. The sum of the unpaid vouchers should, of course, agree with the balance of the *Accounts Payable* control account in the general ledger, as well as with the total of the vouchers in the unpaid voucher file.

THE JOURNAL VOUCHER

In large enterprises care must be taken to see that journal entries are carefully drawn and properly approved before being entered on the books of the organization. To facilitate such a procedure, the journal voucher was first introduced. In a system employing journal vouchers, a separate voucher is prepared for each transaction, necessitating a journal entry such as for the issuance of notes payable to creditors, recording receipt of notes from customers, where special note journals are not in use, as well as for correcting, adjusting, and closing entries.

JOURNAL VOUCHER ILLUSTRATED

THE MODERN MANUFACTURING CO.

JOURNAL VOUCHER

No. 136 Date: Jan. 26, 19___

Cash	1980	00		
Interest Expense	20	00		
Notes Payable			2000	00
To record proceeds of our 60-day note No. 1754, discounted this day at the National Bank of New Jersey.				

Prepared by J.K.L. Approved S.W. Treas. Entered B. G.

Journal vouchers similar to the preceding one are usually prepared by a responsible accounting assistant, then passed on to some executive for approval, after which they are returned to the bookkeeper in charge of the General Journal. In this manner every journal entry is not only carefully drawn but audited and approved before entry, completing a rather necessary step in internal check. Since the journal voucher is such a complete instrument, containing all necessary information, it is not neces-

sary to record explanation, or other detail, in the journal. The exact procedure varies with different organizations. Some merely enter only the date and the journal voucher number, as an explanation of the entry. The postings may be made either from the journal voucher or from the journal itself. The summary postings to the control accounts will be made as usual from the journal.

ADVANTAGES OF THE VOUCHER SYSTEM

It is not to be concluded from the foregoing discussion of the voucher system that such a system is ideal for all business. Small sole proprietary businesses, where the owner maintains a close supervision of the management, do not require an elaborate voucher system. Nor is it to be inferred that all big business will benefit by the installation of the voucher system. Not every organization is adapted to the use of the voucher system. A concern large or small may not be able to pay its accounts promptly, but must continuously resort to extension of time for payments, or give notes frequently in settlement of accounts, or pay accounts in installments. All of this will require cancellation of old vouchers and writing new vouchers, and sometimes canceling the second voucher when it becomes due, and issuing one or two new vouchers to take its place. Under such circumstances, a voucher system may hinder rather than help in the efficient management and operation of the accounts.

When properly installed, to meet the needs of the larger organizations, where finances and personnel are suitable for its introduction, certain very decided advantages accrue to the use of the voucher system, some of which are:

1. It provides for a systematic recording and approval of all invoices, bills, and other items requiring the disbursement of cash.
2. By the use of voucher checks unquestionable receipts are obtained for the payment of definite items.
3. It provides one book in which all purchases of merchandise, services, and expense items are recorded, thus combining at least two journals.
4. Not only are time and space saved by the elimination of the accounts payable ledger, but the accounts usually are maintained in a more flexible manner.
5. By the proper use of the *Unpaid Vouchers* file, all unpaid vouchers may be filed in order of date, which payment should be made to

permit the deduction of cash discounts. Such a practice will facilitate the taking of all proper cash discounts.

6. The voucher system, when properly operated, records immediately all current liabilities. Such a procedure is a decided improvement over the common practice of not recording bills for services and expenses until such time as they are paid.

7. The cash disbursements book used in conjunction with the voucher register is greatly simplified, resulting also in a saving of time and labor in its operation.

8. The vouching and approval of all charges and payments is a decided aid in a system of internal audit and control.

QUESTIONS ON THE CHAPTER

1. Define a *voucher*, a *voucher register*.

2. Describe the operations of the voucher register in particular regard to:
   (*a*) How a purchase is recorded.
   (*b*) When an invoice should be entered.
   (*c*) Treatment of services such as pay-roll.
   (*d*) The use of debit extension columns.

3. Describe the use and operation of the *Sundries* account and money columns.

4. Explain the summary posting from the voucher register.

5. Draw a typical voucher jacket and explain its use.

6. Explain the procedure required if an account, when first recorded, is to be paid in three installments one month apart.

7. How should a voucher payable currently be treated if an agreement is reached with the creditor to permit payment in two subsequent installments? Explain the entire procedure.

8. Draft a voucher register for a manufacturing company with about twelve money columns and explain its use.

9. Explain the procedure required for handling purchase returns or allowances in the voucher system.

10. Explain three decided advantages accruing to the use of the voucher system.

11. Explain the function and use of the unpaid and paid vouchers files.

12. Describe two conditions under which you would not recommend the introduction of a voucher system. Explain why not.

13. What is a *Journal Voucher?* Illustrate and explain its use.

14. Describe the use and the function of the *Accounts Payable Controlling* account or *Vouchers Payable Controlling* account, as it is sometimes called in the modern voucher system.

15. What two checks are there on the balance of the *Accounts Payable Controlling* account, when used in the voucher system?

PROBLEM MATERIAL

Problem 1

F. Adams has conducted a boat-building establishment for several years, and has just had a new accounting system installed. Part of the new system is a "Voucher Register," with the following layout: Vo. No.; Date; Account Credit; Vouchers Payable Cr.; Materials Purchases Dr.; Freight Inward Dr.; Direct Labor Dr.; Indirect Labor Dr.; Electric Power Dr.; Indirect Materials Dr.; Sales Salaries Dr.; General Salaries Dr.; Advertising Dr.; Delivery Expense Dr.; Repairs and Maintenance Dr.; Insurance Factory Dr.; Insurance General Dr.; Office Expense Dr.; General Expense Dr.; Sundry Accounts Cr.; Sundry Accounts Dr. Another new book is the "Check Register," with the following layout: Date; Payee; Voucher No.; Check No.; Vouchers Payable Dr.; Purchase Discounts Cr.; and Net Cash Cr.

Using a twelve-column work sheet, lay out the Voucher Register, and enter the following selected transactions:

November 2 Vo. No. 1.
Received an invoice from Reed Book Store, total $128.00, which represents the purchase of general office supplies and stationery and is to be charged as "Office Expense."

November 3 Vo. No. 2.
A light and power bill from the Public Service Electric Co. for $168.00; this is to be charged Electric Power $142.00 and General Expense $26.00.

November 5 Vo. No. 3.
A bill for advertising from the Home News Publishing Company total $60.00.

November 6 Vo. No. 4.
A shipment of lumber arrived from the Portland Lumber Company total of $1200.00; this is to be charged as Materials Purchases.

November 6 Vo. No. 5.
The Pennsylvania R. R. freight bill on the above-mentioned shipment is received total $66.40.

November 7 Vo. No. 6.
Draw pay-roll, $210.00 for Direct Labor, $60.00 for Indirect Labor, Sales Salaries $84.00, and General Salaries $100.00.

November 8 Vo. No. 7.
An Invoice from the Trenton Hardware Co. total $292.00, of which $228.00 represents Materials Purchases, and $64.00 Indirect Materials.

November 9 Vo. No. 8.
A bill from the Nelson Oram Insurance Agency is received for $356.00; this is to be charged $240.00 to Factory Insurance and $116.00 to General Insurance.

November 10 Vo. No. 9.
An invoice from the General Machine Co., for a new machine delivered and installed \$910.00 and chargeable to Machinery and Equipment.

November 11 Vo. No. 10.
A bill from the Middlesex Transportation Co. for services to date \$144.00, all to be charged as " Delivery Expense."

November 12 Vo. No. 11.
A bill from the Rapid Repair Service \$40.00 to be charged as Repairs and Maintenance.

November 13 Vo. No. 12.
A new delivery truck was purchased from W. E. Mount and Co. for a total delivered price of \$1345.00.

November 14 Vo. No. 13.
Payroll total \$469.00; charge Direct Labor \$216.00, Indirect Labor \$69.00, Sales Salaries \$84.00 and General Salaries \$100.00.

November 15 Vo. No. 14.
An invoice and shipment from the Basic Metals Co., Inc., total \$265.60, chargeable \$205.00 as Direct Materials, \$11.60 as Freight Inward, and \$49.00 as Indirect Materials.

Required:

(1) Using a twelve-column work sheet, rule the top half as the left page of a voucher register and head in columns from left to right as indicated above; and on the lower half of the same work sheet, rule in headings for the balance of the columns, indicating this lower half as the right-hand page of a double-spread book. Allow for fourteen vouchers.

(2) Enter the fourteen vouchers and foot all columns. Cross check the individual totals of the debit columns with the total of the *Vouchers Payable* column.

PROBLEM 2

Open a check register similar to the form used in the text, having the following layout: Date; Payee; Vo. No.; Check No.; Vouchers Payable Dr.; Purchase Discounts Cr.; and Net Cash Cr.

Assume that on November 15, Voucher 4 is paid less a 2% discount; Voucher 6 is paid net November 16; Voucher 11 is paid November 18 without discount; Voucher 8 is paid November 18 less 2% discount; Voucher 13 is paid November 24.

Required: Draft a check register as indicated and enter the payments given above. Total and prove the columns.

CHAPTER XXII

PAYROLL ACCOUNTING AND THE SOCIAL SECURITY PROGRAM

INTRODUCTION

Another branch of the accounting department which requires good records and an adequate system of control is the Payroll Division. Happily, good accounting has always required good records in this important division of the accounting department. The passage of the Federal and State social security laws, however, has made the maintenance of good records in this department almost imperative.

SOCIAL SECURITY LAWS

It is not our purpose to give here a complete treatise on the social security laws, but rather to emphasize the sections and parts which have a direct bearing upon the proper accounting for wages and salaries paid.*

With this purpose in mind, we shall discuss briefly the most important phases of the act. The Social Security Act was approved by the President and became a law August 14, 1935. Since that time the constitutionality of the tax provisions of the Act have been upheld by the United States Supreme Court. The purpose of the Act in brief might be stated as follows: To provide grants to States for old-age assistance, unemployment compensation administration, aid to dependent children, maternal and child welfare, public health work, and aid to the blind. These grants are made direct to the States, and the individual receives the benefits thereof under his State law. A second and

* A copy of the Act and its amendments may be had from the offices of the Social Security Board, or from the United States Government Printing Office, Washington, D. C.

A good exposition of Social Security Taxes is included in the *Alexander Federal Tax Course and Guide,* published by the Alexander Publishing Company, Inc., New York.

Another complete discussion of social security accounting is contained in the *Pathfinder* course in Social Security Accounting, published by the Charles R. Hadley Company, of Los Angeles, California.

The author is indebted to both of these latter sources, as well as to the act itself, for much of the material included in this chapter.

most important purpose of the Act provides for Federal old-age benefits. The only taxing provisions of the Act are contained in the Federal old-age pension tax and the Federal unemployment tax, and these will be discussed in more detail.

FEDERAL OLD-AGE AND SURVIVORS INSURANCE TAX

This part of the Social Security program will be discussed first. Title II of the Act provides for certain old-age and survivors benefits to be paid by the Federal government direct to the beneficiaries. It is strictly a Federal program administered by the Federal government without State aid. For support of these benefits there is imposed a Federal tax on both employers and employees.

Every employer must pay an excise tax on wages paid to each employee up to $3000.00, while the employee pays a similar "income" tax on the first $3000.00 of remuneration received. This latter tax must be deducted by the employer and is payable, together with the employer's share, to the Internal Revenue Department. These taxes are payable quarterly when Treasury Department, Internal Revenue service form SS–1a must be filed.

The rate of tax is identical for both employers and employees, increasing from one to three per cent as follows: 1937 to 1942 inclusive, 1%; 1943, 1948, and 1945, 2%; 1946, 1947, and 1948, 2½%; 1949 and thereafter 3%.

Thus the first $3000.00 of wages paid to an employee is taxable both to the employee and his employer, and the employer must make proper deductions from payrolls and file the Treasury Department form with the local collector of internal revenue.

The amount of the old-age insurance tax paid by the employee is not an allowable deduction on his Federal income tax return because the payment is considered in form of an insurance premium for which the employee himself, his wife, children, or survivors will receive direct benefits.

The amount of the old-age insurance tax paid by the employer, on the other hand, is considered as a legitimate operating expense and as such is deductible on the regular Federal income tax return, and on State income tax returns.

In order to understand better the operations of the Act a few definitions are given herewith in brief.

Employer. — Any person (including corporations, partnerships, etc.) who employs one or more individuals in non-exempt employment.

Covered Employment. — After December 31, 1939 covered employment which subjects both employer and employee to tax includes all services performed within the United States with certain exceptions, which are briefly the following:

(1) Agricultural Labor.
(2) Domestic Service.
(3) Casual Labor.
(4) Family Employment.
(5) Service on foreign vessels.
(6) Federal government Service.
(7) State and local government service.
(8) Service for religious, charitable, and similar organizations.
(9) Service for rail carriers. (They have their own act.)
(10) Service for miscellaneous non-profit organizations.
(11) Service for a foreign government.
(12) Service for a foreign government instrumentality.
(13) Service of student nurses and internes.
(14) Service of fishermen, etc.
(15) Service in newspaper distribution, if under 18.

Employee. — Every individual is an employee if he is engaged in covered employment.

Independent Contractors. — The facts in each case must be considered in determining whether or not one is an independent contractor and therefore not subject to a tax as an employee. Physicians, lawyers, public accountants, dentists, architects, engineers, and others who follow an independent trade, business, or profession in which they offer their services to the public, generally are considered independent contractors and not employees.

IDENTIFICATION

Employers and employees must both be identified by social security numbers. An employer receives an " identification " number, while the employee receives an " account " number.

TAX AND INFORMATION RETURNS

Employee Tax. — The employer is required by law to withhold the employee's old-age insurance tax from wages paid. These funds are held in trust for the Treasury of the United States, and cannot be attached by legal process by a creditor. A separate liability account should be opened in the general ledger to show the balance of this trust fund due at all times to the Federal Government.

STATEMENTS TO EMPLOYEES FOR WAGES PAID AND TAX DEDUCTIONS

Section 1403 of the Federal Insurance Contributions Act provides in brief that every employer must furnish each employee with a statement showing wages paid, and the deductions for tax. Failure to furnish such a statement is punishable by fine. Most business organizations to meet this requirement give a statement every pay day. This statement may take the form of a pay check voucher, a pay envelope, or a payroll voucher, each of which will be illustrated and discussed later in this chapter.

Employer Tax. — In addition to the liability account for the tax which the employer withholds from the wages of the employees, he should provide an account for his own tax. The amount of both taxes, as previously explained, is payable to the Internal Revenue Department quarterly.

STATE UNEMPLOYMENT TAXES

Title III of the Social Security Act treats the subject of unemployment compensation. The Federal Government does not provide *direct* unemployment compensation benefits to employees, but it encourages the States to establish and administer their own unemployment compensation systems. To those States which meet the requirements of the Act the Federal government assists with outright grants to aid in the administration of the laws. Every State, Alaska, Hawaii, and the District of Columbia have enacted unemployment compensation laws, which follow the Federal Act, and have therefore been approved by the Social Security Board.

EMPLOYERS' TAX

The Federal unemployment tax specifically provides that the tax levied by it on employers of eight or more is to be collected by the Internal Revenue Bureau under the direction of the Secretary of the Treasury and is to be paid into the Treasury of the United States as internal revenue collections. Each employer is required to make a return not later than January 31 next following the close of the taxable year. After 1939, the Federal unemployment compensation tax is based upon the first \$3000.00 of wages paid in covered employment, as in the case of the old-age insurance taxes.

The amount of this tax is 3 per cent of the wages paid or payable to employees. The employer may, however, credit his contributions to the State employment funds against this Federal tax, equal to, but not in excess of, 90 per cent of the Federal tax. Most State laws, therefore, provide for a tax levy on employers of 2.7 per cent, which amounts to 90 per cent of the Federal tax. In brief, therefore, the employer pays only a total of 3 per cent of taxable wages — 90 per cent to the State fund and 10 per cent to the Federal Government. For example, if the taxable payroll of a company were \$10,000.00, the Federal tax would be 3 per cent or \$300.00. If the State tax is 2.7 per cent, then the company pays the State \$270.00, exactly 90 per cent of the \$300.00 and the amount payable to the Federal Government would be just \$30.00.

MERIT RATINGS

As there are fifty-one separate State and territorial unemployment compensation laws, each with its own provisions, peculiarities, and special features, we shall not attempt any further study of the State laws except as they effect the so-called "merit ratings." One of the major purposes of the State law is to stabilize employment, and in support of this purpose most States have set up certain merit ratings to employers who meet their standards. These standards are set forth in the Federal Unemployment Tax Act. Good management would also favor a low labor turnover; it will be to the interest of the management, therefore, to study carefully the laws the State or States involved relative to the merit ratings.

Under the merit ratings plans now in use in most States, there is maintained for each employer a separate account to show as credits all the payments made by the employer and all the debits for benefits paid to his employees. Employers with a favorable record are taxed at a lower rate. In most States, when the balance in an employer's account reaches 7 per cent, the tax is reduced; the reductions become greater as the balances become larger. These lower rates would result in no advantage to employers if only *actual* payments to State funds were allowed as credits against the Federal tax, for a lower State tax would mean only a higher Federal tax. To avoid this result, an additional credit is allowed. The Social Security Act provides that, where such merit rating provisions are established, full recognition will be given such rates by means of additional credits. Briefly, if the normal State tax rate is 2.7 per cent and an employer is allowed a merit rating, and required to pay only 1.8 per cent, he will be allowed a credit against the Federal tax for the amounts actually paid the State at 1.8 per cent, and in addition the .9 per cent merit deduction. In effect, the employer will receive the full credit of 2.7 per cent which is the maximum allowed, just as if he had paid the full State tax. The merit rating provisions of every State law now in effect comply with the Federal requirements.

THE WAGE AND HOUR LAW

The Wage and Hour Law, more officially the Fair Labor Standards Act of 1938, was approved on June 25, 1938, and became effective the following October 24th. Under this law a subject employer is one engaged in interstate commerce or in the production of goods for interstate commerce, or whose production substantially affects the flow of interstate commerce. All employment in such commerce or production is subject to both wage and hour provisions of the law, except professional men, seamen, those engaged in fishing or agriculture, or within the area of production, learners, apprentices, and handicapped workers. There are other exemptions for local newspapers, carriers by air, and street and suburban railways. The hour provisions do not apply to any employee of an employer subject

to section 204 of the Motor Carrier Act of 1935 or to Part I of the Interstate Commerce Act.

As in the Social Security Act, wages include the reasonable cost to the employer of furnishing the employee with board, lodging, etc., if customarily furnished. No tax is involved, but maximum hours and minimum rates of pay are prescribed.

RECORD-KEEPING REQUIREMENTS

Neither the Federal nor State acts require any particular system of accounts or records. It is required, however, that each employer keep a true and accurate record of all his workers, the wages paid by him to each worker, and such other information as the administrative body may require.

The various States have released regulations concerning the keeping of the payroll. A composite listing of the more important requirements includes:

1. The period covered by the payroll.
2. The place of employment within the State.
3. The scheduled hours per day or week.
4. The total of taxable earnings for all employees during each pay period.

For payroll record-keeping it is necessary to keep the following information in respect to each employee:

1. Employee's name and address.
2. Date of birth.
3. Social security account number.
4. Occupation and sex.
5. Point of hire and point of employment.
6. Date of hire.
7. Regular rate and basis of pay.
8. Hours worked each work day and each work week.
9. Week's wages at regular rate of pay.
10. Overtime wages, if any.
11. Additions or deductions from cash wages identified.
12. Total taxable wages and date of employment.
13. Date of separation from payroll and reason therefor.

It will thus be seen that, while no particular system of accounts is prescribed, the Federal and State governments require good, accurate records, and the employer is subject to penalties

if he does not keep appropriate records. These records must be open for inspection by authorized State or Federal representatives.

SUGGESTED FORMS AND RECORDS

At this point it might be well to suggest some forms essential or helpful in keeping records which will not only conform with all the new laws, but meet the requirements of all good accountings as well.

EMPLOYMENT RECORD

All form-printing agencies have standard ruled cards or paper forms designed to display the information required for all purposes of the Social Security laws, regarding employee information. The bookkeeping and tabulating machine companies have for sale or will recommend forms which fit their particular machines. Several accountants have prepared Social Security "Sets" for the small company. These sets provide all forms required: Employment records, payroll forms, etc., with directions for their use.

No particular forms for employment records are therefore illustrated, but, regardless of the source of the form, it should contain the following information:

1. Employee's full name, address, and social security account number.
2. Date and place of birth, sex and occupation.
3. Dependents and other pertinent information, including education and previous employment.
4. Wage rate, basis of pay and starting date.
5. Departmental or clock number.
6. Position changes, advancement.
7. Accidents.
8. Reason for leaving.
9. Signature of employee.

PAYROLL FORMS

Here again all the bookkeeping and tabulating machine companies have forms designed to fit their particular equipment. There are, of course, many business organizations which have not this type of equipment and which must rely upon hand-

written records. The standard form companies, however, have again come to the aid of these smaller companies and have printed some very good payroll forms. The illustration opposite is presented simply as an idea of what such a form should look like, and to act as a basis for a short discussion on how this phase of the work is carried out.

This form is used for each department, and needs very little, if any, explanation. The deductions are first for Federal old-age benefits, and amount to one per cent of the total wages earned. Some organizations make other deductions for the convenience of the employee, as the community chest deductions illustrated above, or deduct insurance premiums for company group insurance. In a few States there is a deduction made for the employees' payment to the State unemployment fund; such a deduction could, of course, be entered next to the Federal Old-age Benefits deduction, before the other miscellaneous deductions are listed. The last money column is the amount due the worker, for which a payroll check will be drawn.

PAYROLL CHECK

A voucher check will best meet the needs of the social security program. The illustration on page 420 shows a pay check with a detachable voucher. This voucher will serve as a proper employee statement in conformity with the law. There are other ways of giving this information to the employee. One is by filling in a pay envelope especially printed with the same information as the payroll voucher, illustrated on page 420, attached to the payroll check. An envelope would be used if the men were paid in cash, as this would be the easier form of statement and receipt.

ACCOUNTS REQUIRED

It will be necessary to establish several expense accounts and several liability accounts to record properly transactions peculiar to the social security program. The following are suggested, together with a brief explanation of their function and use.

1. "Old-age and Survivors Insurance Tax." This expense account will be used to record the amount of the employer's payroll tax. It will be debited each pay day with 1% of the total

WEEKLY PAYROLL

DEPARTMENT: Three

WEEK ENDED December 26, 1939

EMPLOYEE NAME	SOCIAL SECURITY ACCT. NUMBER	CLOCK NUMBER	REG. HRS. WORK	RATE	TOTAL EARNED	DEDUCTIONS: FED. O.A.B.	DEDUCTIONS: OTHER		NET PAY
John Burns	520-76-1009	124	40	1.00	40.00	.40			39.60
William Lucas	810-25-4973	125	36	1.00	36.00	.36			35.64
Edward Bradley	614-22-3321	126	40	1.20	48.00	.48			47.52
Henry Horns	018-49-4705	127	40	1.00	40.00	.40			39.60
Joseph Cramer	924-83-1318	128	32	1.20	38.40	.38	C.C.	.40	37.62
Joseph Mount	638-64-6924	129	40	1.20	48.00	.48	C.C.	.50	47.02
Edward Oly	139-19-4296	132	36	1.00	36.00	.36			35.64
J. Edward Smith	615-51-9231	133	40	1.15	46.00	.46	C.C.	.40	45.14
Frank Johnson	318-29-4698	134	40	1.25	50.00	.50	C.C.	.50	49.00
					382.40	3.82		1.80	376.78

PAYROLL CHECK No. **1375**

NEWARK MANUFACTURING COMPANY

15 BALDWIN AVE. · · · NEWARK, N. J.

DATE *Dec 26* 194*1*

PAY *Thirty seven and 62/100* DOLLARS

TO THE ORDER OF *Joseph Cramer*

TO: MECHANICS NATIONAL BANK
NEWARK, N. J.

NEWARK MANUFACTURING COMPANY

John Price TREASURER

C. Hopkins CONTROLLER

NEWARK MANUFACTURING COMPANY – 15 BALDWIN AVE. – NEWARK, N. J.

THE ABOVE CHECK IS IN FULL PAYMENT OF THE FOLLOWING
DETACH AND KEEP FOR YOUR RECORDS

DATE	NAME	CLOCK NO.	SOCIAL SECURITY NO.	HRS.	RATE	TOTAL EARNED	DEDUCTIONS		CHECK *1375* AMOUNT
							FED. O. A. B.	OTHER	
Dec 26/41	*Joseph Cramer*	*128*	*924-83-1318*	*32*	*1.20*	*$38.40*	*$.38*	*C.C. $.40*	*$37.62*

taxable payroll and at the same time the corresponding liability account " Employers' Old-age and Survivors Insurance Tax Payable " will be credited. The expense account will be closed at the end of the accounting period with all other operating expense accounts.

2. " Federal Unemployment Compensation Tax." This expense account will be used to record the employer's tax for Federal unemployment. The total tax payable on the affected payroll for the year is usually .3%. The Federal tax is 3%, but a 90% credit is allowed for contributions made to the State Unemployment Fund, which is 2.7%, leaving only .3% on the affected wages. The corresponding credit is to " Federal Unemployment Compensation Tax Payable " account.

3. " State Unemployment Compensation Tax." This account is used to record the employee's tax paid to the State Unemployment Fund mentioned above. The debit is made for taxes due the State, which is based on wages paid, and taxed at 2.7%, except where a merit rating is in effect which will lower this rate. The credit made at the same time is to a corresponding liability account " State Unemployment Compensation Tax Payable."

4. In addition to the three liability accounts mentioned in conjunction with the three expense accounts above, it will be necessary to open one other liability account to represent the employer's liability for employees' deductions. This account, " Employees' Old-age and Survivors Tax Payable " should be credited with the total of the payroll deductions made each pay day. It will measure the company's liability to pay this sum to the Federal Government.

DEMONSTRATION CASE

Suppose the X Company payroll for the week of December 26, 1940 is as follows:

Factory Payroll	$1000.00
General Salaries	500.00

In this illustration, in order to simplify matters, we shall assume that the entire payroll is subject to tax (no one receiving more than $3000.00 per year). This payroll then will be subject to: (1) A 1% deduction for the Federal Old-age and Sur-

vivors Insurance Tax, which amounts to $15.00; (2) A Federal Unemployment Compensation Tax of .3%, which amounts to $4.50; and (3) A State Unemployment Compensation Tax of 2.7%, which amounts to $40.50.

In order to see most clearly the entries required we shall make use of the general journal, giving a complete explanation of each entry.

General Journal

–1–

Factory Payroll	$1000.00	
General Salaries	500.00	
Vouchers payable		$1485.00
Employees' Old-age Tax Payable		15.00
To record the payroll for the week of December 26, 1940.		

(The entry above would appear in the voucher register.)

(The following entry would be written in the cash disbursements book.)

–2–

Vouchers Payable	$1485.00	
Cash		$1485.00
To record payment of payroll December 26, 1940.		

(The following entry should also be written in the general journal to record the proper liability.)

–3–

Old-age Security Tax	$15.00	
Federal Unemployment Comp. Tax ..	4.50	
State Unemployment Comp. Tax	40.50	
Employer's Old-age Tax Payable ..		$15.00
Federal Unemployment Comp. Tax Payable		4.50
Employer's State Unemployment Tax Payable		40.50
To record the liability and expense incident to the pay-roll of December 26, 1940.		

Calculated as follows: Employers 1% of $1500.00 for Old-age Tax; .3% of $1500.00 for Federal Unemployment; 2.7% of $1500.00 for State Unemployment Tax.

At the end of the year or quarterly, as vouchers are prepared and payment made for the State and Federal Social Security Taxes, each accrued tax payable account should be debited, and vouchers payable credited, in the voucher register. This entry to be followed by one in the cash disbursements book, debiting vouchers payable and crediting *Cash.*

QUESTIONS ON THE CHAPTER

1. What are the two principal divisions of the Social Security laws?
2. (*a*) Give the important tax provisions of the Old-age Insurance section. (*b*) Who is taxed for this insurance? (*c*) How much?
3. What is the nature of the two taxes paid by the employer?
4. Is the tax paid by the employer deductible from his Federal and State income tax report?
5. Is the deduction made from an employer's wage an allowable deduction on his Federal or State tax return?
6. Suggest the information you should like to see kept on an employer's record.
7. What specific records must be kept to comply with the several social security acts?
8. Explain merit ratings, giving consideration to the following: (*a*) The purpose. (*b*) How they are arrived at. (*c*) The result in favor of the employer.
9. In connection with the Federal Unemployment Compensation law, explain the following: (*a*) Employer. (*b*) Employee. (*c*) Covered employment.
10. Explain the relation of the State Unemployment tax to the tax paid to the Federal Government for Unemployment.

PROBLEM MATERIAL

1. Draw a payroll form for the Modern Manufacturing Company and enter the following information: Period week ended January 11. T. Tyler, 36 hours, \$.42 per hour; B. Mack, 40 hours, \$.45 per hour; C. Clyde, 40 hours, \$.50 per hour; J. Thomas, 36 hours, \$.60 per hour; J. Wallace, 40 hours, \$.60 per hour. Furnish social security and clock numbers for each employee. Deductions for old-age benefits are 1%. In addition \$.50 is deducted from the following for Community chest pledges: Clyde, Thomas, and Wallace.

Required:

(1) Rule the form which will best display the information.
(2) Enter the payroll.
(3) Total all columns.

2. Draw a payroll check for Mr. C. Clyde, with a voucher attached.

3. Assume the following: The payroll for the week ended January 18, 1941 is as follows:

Factory payroll	$3600.00
General office	1400.00
Salesmen's salaries	1200.00

Assume all salaries are taxable.

Required: Write in journal entry form:

(1) Journal entry to record the payroll in the voucher register.
(2) Journal entry when the payroll is paid through the cash disbursements book.
(3) General journal entry to show the proper liability.

4. Assume the annual payroll of the Maxim Manufacturing Company amounts to $18,000.00 before deductions and all subject to tax. The State unemployment tax is 2.7% for employees.

Required:

(1) Federal Old-age Tax.
(2) Federal Unemployment Compensation Tax.
(3) State Unemployment Compensation Tax.
(4) Journal entries to voucher the pay roll.
(5) Journal entry for payment through the cash disbursement box.
(6) General journal entry to record liability to the Federal and State governments.
(7) Entry to record the payment to the Federal and State governments.

CHAPTER XXIII

ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

INTRODUCTION

In our opening chapters the student was first presented with an introduction to financial statements. The purpose then was to acquaint him with the fundamental make-up of these statements, so that he would have a foundation for the work which followed. The next few chapters presented the bookkeeping cycle, including the operation of a complete set of double-entry books. This material was followed by a study of the accounting work required at the close of the accounting period, including a study of adjustments, work sheets, and closing the books and the preparation of financial statements. Then followed a study of the accounting problems presented by the partnership, the corporation, and the manufacturer. All of this work may properly be classed as constructive accounting, and is necessary so that the student would have a good foundation in theory and practice. It is our purpose now to present once more the balance sheet and profit and loss statement, but this time, however, with a view of analytical interpretation.

MANAGEMENT'S USE OF FINANCIAL STATEMENTS

Statements are prepared, of course, for many users. Credit-grantors, banks, and investors all study financial statements and each may be looking at the statement with his particular problem in view. While we are interested in all these groups and shall include the viewpoints of some of them, for the most part we shall have in mind the need of the business management in operating its own business.

The accounting department will, of course, prepare the statements, and it often becomes the duty of the chief accountant or controller to explain and interpret the financial statements to the management. This work is often done under the guidance and supervision of a Certified Public Accountant. With this in mind, the controller or public accountant will be inter-

ested in seeing not only that the accounting system is adequate, but that its operation will yield statements which will facilitate his work.

OTHER USERS OF FINANCIAL STATEMENTS

A financial statement prepared for use by the management or owners of the company would, of course, be entirely satisfactory for the banker or the creditors. The banker or the creditors will not, ordinarily, have presented to them all the detail available to the management. A balance sheet or profit and loss statement prepared for publication is usually in a much more condensed form than that prepared for the management. Many published balance sheets are therefore useless for study, and an interested person will often have to ask for supplementary information, or even a more detailed and complete financial statement.

Banks and credit departments, however, usually keep a complete file for each of their customers, and make their own use of this material as an aid in analysis and interpretation. Prospective purchasers of a business, too, may wish to study a company's financial statements, and may wish very complete detail; often they employ their own certified public accountants and attorneys in order to see that they are made aware of a full and complete as well as correct set of reports before they are willing to invest their capital. Then, too, the Government is an interested party, because of the income tax angle. The Federal Government, and frequently the State, will wish to know a great deal about each taxpayer. Officials viewing the material presented on their forms will often request supplementary data, particularly if the report as filed seems inadequate for their purpose.

There are other reasons which will prompt the preparation of balance sheets, as in the case of a bankrupt organization. In this instance an entirely different set of values may be ascribed to the assets, because the trustees or receiver in bankruptcy will probably wish to know, besides the book amount of the assets, the amount which the assets will bring under the peculiar conditions of bankruptcy sale. The purpose for which a statement is to be used must, therefore, be kept in mind as the statement is prepared. At what value should an asset such as *De-*

livery Equipment be listed on the balance sheet? Certainly a higher valuation is justifiable for a going concern than the value which should be ascribed if the balance sheet is being prepared for a concern winding up its affairs, as in bankruptcy.

In our present study, however, we shall concern ourselves only with the analysis and the interpretation of financial statements for a going concern.

THE PROBLEM OF ANALYSIS AND INTERPRETATION

A. The Balance Sheeet. — The principal problem in the study of a balance sheet, it would seem, would be largely one of valuation. The problem of valuation of assets on the balance sheet is very intimately connected with the interpretation of the statement. As the banker reads a balance sheet, he is trying to interpret the concern's true financial position. In doing this he very carefully studies the amounts ascribed to the assets listed. As the business man reads his own balance sheet, he looks at valuations as an aid in understanding his true position. We can, therefore, conclude that the problem is largely one of proper valuation.

B. The Profit and Loss Statement. — This statement is of vital interest to all concerned, because it reviews the activities of the organization over a period of time. To be of value it must, of course, contain a full disclosure of all expense and income for the period. In order that the reader may get a good picture of the operation of the period under review, the profit and loss statement should show as much detail as possible.

C. Need for a Study of Both Statements for Accurate Analysis of Financial Condition. — Not many years ago the balance sheet was considered by many accountants, bankers, and credit men as the principal financial statement; often a credit analysis could be based largely, if not entirely, on a study of the balance sheet. The statement of income, profit, and loss was certainly given only secondary consideration. Many bankers would grant a loan simply based on a satisfactory balance sheet, but those days have gone forever. Today the banker not only wishes to see the current balance sheet of a prospective borrower, but he wants usually the past four or five in addition. Similarly, he will request the past five profit and loss statements.

From these statements he can get a good idea of what has happened in the past, and up to the date of the loan application. But even this will not always satisfy him. Quite frequently the banker will request the purpose of the loan, and he will have a lot to say regarding this aspect of the transaction. This still does not complete his study; very often he will request a report of estimated income and expense, probable receipts and disbursements, for the next year, including, of course, a payment to him as amortization of the loan as per agreement.

The banker studies all these reports together — not any one of them alone will do — and only after a careful study of these several statements will a decision be made.

PROPER CLASSIFICATION OF ACCOUNTS AS AN AID IN ANALYSIS

The accounting department can aid a great deal in this problem. Standardizing accounting terminology and nomenclature will help a great deal, because faulty and misleading account titles may lead the reader of a balance sheet to a wrong conclusion. Another help in the solution of this most important problem is the use of standard forms for both the balance sheet and the profit and loss statement. If one order of presentation is followed one month, then the same order should be followed the next month if intelligent interpretations are to be made. Standard treatment of certain accounts should be established, and, once established, should not be varied except for good reason. For instance, in the matter of Freight and Express Charges, or Purchase and Sales Discounts, there may be dual theory as to how these items should appear on the profit and loss statement; but, once the problem is settled for a particular organization, then they should always appear in the same place, and so on with account after account.

The use of standard forms and of uniform accounting is greatly facilitated by a classification of accounts. Even the smallest business will benefit by a good classification of accounts, and the advantages are even greater for large organizations.

There are several classifications in use, and to set up arbitrarily any classification as superior to all others would be going

a little too far in standardization. The individual business and its particular problems must be studied before any classification is decided upon. The student at this time should review Chapter IV and reread the suggested classification of accounts given there.

ANALYSIS TECHNIQUE

Almost every analyst will have a technique of his own, but some of the basic forms and methods of procedure are common to all good analysts. Several elementary forms illustrating method and technique, together with some of the observations, will now be presented. As we are interested primarily in principles, our illustrations are purposely simplified.

CASE I: THE BALANCE SHEET

A method used widely by analysts is to spread the various assets vertically on analysis paper. Usually the most liquid assets appear first, cash heading the list, followed by other current assets. This group will be totaled and a space provided for ratio markings or other comments. Next, following directly below, will appear the other groups of assets, similarly totaled and spaced. After the assets have been listed, the liabilities will be displayed in a similar manner. Alongside each item on the balance sheet will be listed percentage relationship of the several items to the group, and another percentage illustrating the percentage relationship of the item to the total assets. Other percentages or ratios may be worked up to illustrate particular information interesting to the individual.

SOME OBSERVATIONS FROM THE BALANCE SHEET: GENERAL STATEMENT

To interpret a balance sheet properly, one must understand that it consists of three major divisions, two of which are termed working capital, and fixed assets—plant and equipment, respectively. The working capital is represented by current assets and current liabilities, and its problem of interpretation is the probability that the current assets are sufficient to pay the current liabilities as they become due, and to pay the cost of materials and labor that will be expended in providing addi-

ILLUSTRATION OF BALANCE SHEET WITH PERCENTAGES

The York Company

Balance Sheet

	Assets				
%	*Current:*				%
10.71	Cash		$30,000.00		20
4.29	Notes Receivable		12,000.00		8
	Accounts Receivable	$ 84,000.00			
	Less Reserve	4,000.00			
28.57			80,000.00		$53\frac{1}{3}$
10.00	Inventories		28,000.00		
	Total Current Assets			$150,000.00	100%
	Deferred Assets:				
2.14	Prepaid Advertising		6,000.00		
1.43	Prepaid Insurance		4,000.00		
				10,000.00	
	Fixed Assets:				
	Delivery Equipment	$ 14,000.00			
3.57	Less Reserve	4,000.00			
			10,000.00		$8\frac{1}{3}$
	Buildings	54,000.00			
11.8	Less Reserve	14,000.00			
			40,000.00		$33\frac{1}{3}$
	Machinery & Equip.	75,000.00			
21.43	Less Reserve	15,000.00			
			60,000.00		50
3.57	Land		10,000.00		$8\frac{1}{3}$
	Total Fixed Assets			$120,000.00	
100.00	*Total Assets*			$280.000.00	100%
	Liabilities				
%	*Current:*				%
	Notes Payable:				
1.43	Banks		$ 4,000.00		5.56
2.14	Trade Notes		6,000.00		8.33
21.43	Accounts Payable		60,000.00		83.33
.71	Salaries & Wages Accrued		2,000.00		2.78
	Total Current Liabilities			$ 72,000.00	100.00
	Fixed Liabilities:				
7.14	Mortgage (on Buildings)		20,000.00		83.33
1.43	Notes on Delivery Equipment		4,000.00		16.67
	Total Fixed Liabilities			24,000.00	
	Total Liabilities			96,000.00	100%
	Net Worth				
	Capital Stock Auth.	$200,000.00			
	Less Unissued Stock	80,000.00			
	Outstanding Shares			120,000.00	
42.86	(par value $100)				
22.86	Surplus:			64,000.00	
100.00	*Total Liabilities and Net Worth*			$280,000.00	

tional materials for sale while the goods on hand at the date of the balance sheet are being sold to customers and the cash collected therefrom. The problem with the fixed assets is a determination of the ability of the enterprise to make sufficient profit to replace the fixed assets as they become worn out without calling upon the stockholders for an additional contribution of capital; and, in addition, to distribute to the stockholders an adequate compensation in the form of dividends on their investment in the enterprise.

From the illustration opposite we may make many observations. The observations will have very little value, however, unless compared with something. Some other period, or some other company must be used as a basis of comparison, for, taken alone, such a study can mean very little. Of course, we may make one or two general observations and point out certain favorable ratios. The best service from an analytical study will come from a study of comparative balance sheets. The figures of one year are compared with the figures of another; then trends may be studied which will be valuable in guiding the management in plotting its course for the next period. At this time, however, we shall mention several common observations usually made from the Balance Sheet and comment on the relative value of each observation, after which we shall present an illustration of Comparative Balance Sheets and apply some of the theory here presented.

WORKING CAPITAL

Without a doubt one of the most important observations to be made from a study of the balance sheet is the ratio that exists between current assets and current liabilities. This study determines the working capital. The ability of a concern to meet its current obligations as they mature may determine whether or not it will remain in business.

In our illustration the working capital ratio is 2.08 to 1, which indicates that this company has \$2.08 worth of current assets to meet \$1.00 of current liabilities. Ordinarily this would be a quite satisfactory ratio. However, before we can say any ratio is satisfactory or not there are one or two points of vital interest which should be made clear. First, how accurate is the ratio? Mathematically perfect; and if our current assets

are truly current in the real meaning of the term, and the current liabilities are correctly stated — then the ratio is very satisfactory.

First, in an actual case we should have to be sure that each item listed as a current asset was properly included. Current assets should be limited to cash and those items which, in the normal course of business, we have a reasonable right to expect will be converted into cash in a relatively short time. This period may be three months, six months, or even a year, depending upon several factors to be decided in each individual case. The important point to remember is that, whatever line of limitation is used on the asset side of the balance sheet to mark off current assets, that same division point must be used on the liability side. In our case the York Company has $150,000.00 of current assets, and $72,000.00 of current liabilities. Of what value would these figures be, if we were to determine that the most optimistic view of the current assets would be a conversion to cash in six months, while only those items which are immediately due are listed as current liabilities, but that before six months have passed the current liabilities will be doubled? However, if we can say that the current assets amount is made up of items that we have every reasonable right to believe will be converted into cash within six months, and that there would be no great increase in the current liabilities for the next six months, then this ratio of 2.08 to 1 would seem to be very satisfactory. Current need for funds to carry on the business must be anticipated. Payments on the already existing liabilities must be made, and the current expenses such as payrolls must be met. Therefore, unless there is a good excess of current assets over current liabilities, the concern is likely to be financially embarrassed. There is no such thing, however, as a standard ratio. The ratio which exists must be studied in the light of all facts as they exist. The needs for the coming period, as well as the current liabilities, may have to be studied before the answer can be given to the question as to whether or not a particular ratio is satisfactory.

The relation existing between the total current assets and the total current liabilities is known as the *current ratio*. This ratio is usually more indicative of the condition of a business than the actual excess of current assets over current liabilities in dollars,

known as working capital. This fact is apparent in a study of two organizations having the same amount of working capital. For example:

Company X

Current Assets	\$25,000.00
Current Liabilities	10,000.00
Working Capital	\$15,000.00

Company Y

Current Assets	\$150,000.00
Current Liabilities	135,000.00
Working Capital	\$ 15,000.00

It will be evident that while Company Y has the same amount of "working capital" as Company X in dollars, the ratio of current assets to current liabilities for Y is only 15 to $13\frac{1}{2}$, while the X company has a ratio of $2\frac{1}{2}$ to 1 and a much more favorable position. The working capital ratio, therefore, gives a much clearer conception of the company's financial position. It has often been stated by analysts that a ratio of two to one should exist. This is no doubt a safe ratio generally, but in each case other factors may have to be studied at the same time before any ratio is stamped as satisfactory.

ANALYSIS OF COMPONENTS OF WORKING CAPITAL

CURRENT LIABILITIES

The items comprising this group of accounts represent past transactions. These accounts are all fixed; they must be paid at par in a relatively short period of time, if the credit of the business is to be maintained. Current assets, on the other hand, are not so definite and certain. In general, they are funds and the items from which funds are to be obtained to liquidate the already existing debts, and to carry the immediate financial needs of the business such as payroll during the next period. It might be well, therefore, to study the several accounts making up current assets.

CASH

This item should, of course, be free funds available for disbursement. It should not contain any "non-cash items," such as I.O.U's of officers or employees, postage stamps, or any other

items not bankable at par. Just how much cash a given concern should have could be determined only after a statistical study of its past business. Past records should indicate the demands for cash under similar circumstances. Naturally, the liquidity of the remainder of current assets will have a bearing; funds from these sources must be counted upon to augment the existing cash balance.

NOTES RECEIVABLE

The notes grouped under this caption must be truly current assets. They must be good in all respects and relatively short-term in order that the funds from these instruments will be readily available for a going concern. If notes do not meet these two requirements, they should not be included with current assets. If notes are taken for past due accounts, they may be of doubtful value, probably no better than the accounts. Trade Acceptances, on the other hand, are usually considered a very fine type of negotiable instrument. They arise from a bona fide business transaction of a current nature; the passing of merchandise from the seller to the buyer, and may be drawn only for short terms. Long-term notes should be excluded also from this caption, because the funds from such instruments will not be readily available.

In order to facilitate the study of notes receivable some such classification as the following should be adopted:

1. Trade Acceptances Receivable.
2. Customers Notes Receivable.
3. Notes of Officers and Employees.

Group 3 might be placed under a separate caption: *Other Current Assets*, or simply *Other Assets*, depending upon the liquidity of the items.

ACCOUNTS RECEIVABLE

Listed under this caption should be only good accounts. Those accounts known definitely to be worthless should, of course, be charged off to the Reserve for Doubtful Accounts. Those which are of doubtful value should be transferred to a suspense account and kept there, apart from accounts grouped as current assets. In addition, a reasonable reserve for doubt-

ful accounts should be provided against the probability of loss from accounts, which are from all current appearances good but which may subsequently prove worthless. The sufficiency of this reserve can be judged only in light of past experience of a particular organization.

As a further aid in evaluating Accounts Receivable, they might be kept in well defined groups as suggested by the following:

a. Trade Accounts Receivable.
b. Accounts of Officers and Employees.
c. Due from Subsidiary Companies.
d. Accounts in Suspense.

INVENTORY

This item, if included in current assets, should also meet the requirements set forth for accounts and notes. Namely, all the items should be good and salable, and there should be no question of their convertibility into accounts receivable and cash. For every item of inventory must first be sold, converted into an account receivable, and the period provided in the credit terms pass before the proceeds from the sale of the inventory will be available for operations. The need for excluding any item which will not meet these tests should therefore be apparent. In a mercantile organization the inventory usually consists of finished goods available for sale in their present condition. Raw Materials Inventories in the hands of a manufacturer, on the the other hand, may or may not be considered as satisfactory current assets, depending on several factors. If raw materials are quickly converted into finished goods under normal operating conditions, then, everything else being equal, they may be considered as good current assets; but, if the manufacturing process is lengthy, then there may be a serious question as to whether items of this character should be included. The amount of inventory compared with the needs for such material should be considered. A normal or average inventory may be safely included in current assets on the balance sheet of a going concern, but abnormal investments in inventory should be scrutinized. Too little is likely to be as serious a fault as too much; just enough to meet regular normal needs should be carried, under ordinary circumstances. The turnover of inventory

should be studied to ascertain this amount. If a concern uses, under normal conditions, $120,000.00 worth of raw materials a year and there was a complete turnover each month, then an inventory of $20,000.00 would be completely used in sixty days, and such an amount might be very satisfactory.

As a further aid in evaluating this important asset, separate inventories should be maintained for each class of stock held. For a mercantile organization buying finished goods ready for sale, perhaps inventories by principal lines carried might be all that is necessary. As a furniture house might list:

1. Household Furniture.
2. Specialties.
3. Radios.
4. Pianos.

A manufacturer, on the other hand, will have separate inventories, such as:

1. Inventory of Raw Materials.
2. Inventory of Partly Finished Goods.
3. Inventory of Finished Parts.
4. Inventory of Assembled Units.
5. Inventory of Finished Goods.
6. Inventory of Manufacturing Supplies.

ACID TEST RATIO

Another ratio often used in analyzing financial statements is known as the acid test ratio. This ratio compares the total quick current assets, made up of cash plus notes receivable and accounts receivable to the total current liabilities. In our illustration, The York Company has $122,000.00 in quick current assets, compared with $72,000.00 in current liabilities, or a ratio of 1.69 to 1. It will be noted that the so-called *quick current* assets are all the current assets except inventory. This asset is excluded in making the acid test, because inventories must be sold before their proceeds are available; and the uncertainty of selling, as well as the time involved in the conversion of raw materials to finished goods to accounts receivable and finally to cash, are the factors which exclude inventories from this ratio. An acid test ratio of one to one is usually considered a safe ratio.

OTHER RATIOS

Some analysts like to compare merchandise inventories to accounts receivable. These two items often make up the bulk of current assets, and a ratio of *merchandise to accounts receivable* may indicate an important trend. A ratio of *fixed assets to fixed liabilities* is also frequently used. Funds obtained from fixed liabilities are generally used for the acquisition of fixed assets. In our illustrative case, the York Company has $120,000.00 in fixed assets, as compared to only $24,000.00 in fixed liabilities, giving a ratio of five to one. The use of this ratio cannot be very helpful to the analyst. To the writer, its use is of little practical significance. The figures in our illustrative case indicate that much of the capital assets were obtained from the sale of capital stock, or built up over a period of years by "plowing back" profits, instead of taking them from the business in the form of dividends.

Another study often used by analysts is the ratio between *net worth* and *fixed assets*. In our case, the York Company has $184,000.00 in net worth and $120,000.00 in fixed assets, a ratio of 1.53 to 1. This is another ratio of doubtful value because the amounts used may result from so many different factors. In our case, the ratio indicates that the owners by original investment or retention of profits or both have built up this favorable ratio.

There are other ratios used by different analysts, but those presented here are illustrative of the most important used in studying the Balance Sheet. These ratios alone will mean very little; but, compared to another company engaged in a similar line of business, they may take on a real significance. For the management, they serve their best purpose in comparative balance sheets. The management compares the items of one balance sheet with the items of a prior balance sheet or series of prior balance sheets, and in this way may note trends and see whether the company is moving forward or backward; a going concern cannot stand still.

COMPARATIVE BALANCE SHEET

As just pointed out, trends are better studied by the use of comparative balance sheets. A going business is always chang-

ing. A study of comparative statements, profit and loss as well as balance sheet, will indicate financial and operating trends, and by a careful study of one period with that of another, unfavorable conditions may be "spotted" at their inception and corrective measures adopted to correct or eliminate the trouble. As was stated before, comparisons must be made from both statements but just now we shall confine ourselves to a study of comparative balance sheets, after which we shall study comparative profit and loss statements.

ILLUSTRATION

In order to simplify our presentation, in the illustrative balance sheet, assets are shown net of reserves. This will in no way affect the principles involved, and that, of course, is what we are primarily interested in.

SOME OBSERVATIONS FROM ILLUSTRATION

In the illustration opposite the current balance sheet of the York Company is compared with the balance sheet of one year ago. The increase or decrease in amounts of each item is listed, followed by the ratio that the current year's figures bear to the last previous year.

As the current year's figures have already been discussed, only current trends observed from a comparison of the current year and the past year will be mentioned.

WORKING CAPITAL

The current working capital ratio is 2.08 to 1, or 208%, while for the last year it was only 1.82 to 1, or 182%, an increase of 16%, which is a very fine improvement. The acid test ratio for the current year as previously determined is 1.69, while for last year it was 1.48, an increase in favor of the current year of 21%. This increase is accounted for first by an increase in current assets of $10,000.00, and secondly by a decrease in current liabilities of $5000.00. Then, too, the individual items comprising the current assets might be compared. *Cash* shows a healthy increase 107% of the last year's figure. While the current amount of *Notes Receivable* has declined some 14% as compared with the last year's figure, this may indicate a good

THE YORK COMPANY — Comparative Balance Sheet, December 1940

Assets	This Year (1940) Amount	This Year (1940) Percentage	Last Year (1939) Amount	Last Year (1939) Percentage	Increase or Decrease* Amount	Increase or Decrease* Ratio
Current Assets:						
Cash	30 000 00	10 71	28 000 00	10 29	2 000 00	1 07
Notes Receivable	12 000 00	4 28	14 000 00	5 15	2 000 00*	86
Accounts Receivable	80 000 00	28 57	72 000 00	26 47	8 000 00	1 11
Inventories	28 000 00	10 00	26 000 00	9 56	2 000 00	1 08
Total Current Assets	150 000 00	53 56	140 000 00	51 47		
Deferred Assets:						
Prepaid Advertising	6 000 00	2 14	4 000 00	1 47	2 000 00	1 50
Prepaid Insurance	4 000 00	1 43	4 000 00	1 47	–	
	10 000 00	3 57	8 000 00	2 94		
Fixed Assets:						
Delivery Equipment	10 000 00	3 57	8 000 00	2 94	2 000 00	1 25
Buildings	40 000 00	14 29	41 000 00	15 07	1 000 00*	98
Machinery & Equipment	60 000 00	21 43	65 000 00	23 90	5 000 00*	91
Land	10 000 00	3 57	10 000 00	3 68	–	-
	120 000 00	42 86	124 000 00	45 59		
Total Assets	280 000 00	100 %	272 000 00	100 %	8 000 00	1 03
Liabilities						
Current Liabilities						
Notes Payable Banks	4 000 00	1 43	5 000 00	1 84	1 000 00*	80
Notes Payable Trade	6 000 00	2 14	7 500 00	2 76	1 500 00*	80
Accounts Payable	60 000 00	21 43	62 500 00	22 97	2 500 00*	96
Salaries and Wages	2 000 00	71	2 000 00	73	–	
Total Current Liab.	72 000 00	25 71	77 000 00	28 30		
Fixed Liabilities						
Mortgage (on Bldgs.)	20 000 00	7 14	22 000 00	8 09	2 000 00*	91
Notes on Del. Equip.	4 000 00	1 43	–		4 000 00*	
	24 000 00	8 54	22 000 00			
Total Liabilities	96 000 00	34 25	99 000 00	36 39		
NET WORTH						
Capital Stock	120 000 00	42 86	120 000 00	44 11	–	-
Surplus	64 000 00	22 86	53 000 00	19 50	11 000 00	1 21
	184 000 00	65 72	173 000 00	63 61		
Total Liab. & Net Worth	280 000 00	100 %	272 000 00	100 %	8 000 00	1 03

condition; perhaps some of the notes have matured and have been paid in cash. There is also a good increase in *Accounts Receivable.* This may simply mean an increase in the volume of business. The *Notes Payable to Banks* have been reduced, as have the *Trade Notes Payable*; both of these trends are very fine, and a condition the banker likes to see as he compares one period with another. All in all, there seems to be a good, healthy condition existing in the current situation of the York Company. All the trends, as far as working capital is concerned, are pointing in the right direction. There has been a slight increase in the deferred assets; this is caused by an increase in *Prepaid Advertising.* Ordinarily this is a healthy sign. It indicates that the company may have spent more to advertise; and, if its trend is toward an increase in volume of business (as might be indicated in the increase in *Accounts Receivable*), it looks like a good move to have increased the advertising.

As we look at the fixed assets, we note that the total for this year is less than that for last year. Looking a little closer, we may note that there has been a decline in the net value of *Buildings* and *Machinery and Equipment.* We must remember, however, that these accounts are exhibited net of depreciation; therefore, this apparent shrinkage in amount may be wholly due to depreciation. We may note further that the *Delivery Equipment* has been increased despite depreciation. This no doubt indicates the purchase of a new truck. This observation is obvious if we look at the fixed liabilities *contra*; there we see $4000.00 in *Notes on Delivery Equipment.* Therefore, while the total net value of *Delivery Equipment* is up $2000.00 the offsetting notes payable of $4000.00 indicates clearly that there has been recorded appropriate depreciation. This is always a good sign and one frequently observed by the banker. He likes to see that depreciation is adequately provided.

We might go on with other observations, but those given will suffice to illustrate what may be done with comparative balance sheets.

ANALYSIS OF THE PROFIT AND LOSS STATEMENT

A profit and loss statement for The York Company is presented on page 442 and reviews its activities for the current year.

The statement overleaf has listed on the right a percentage column, which will facilitate comparison of the several items on the statement. " Net Sales " is the basis of comparison and therefore marked 100%. The returns and allowances were 3.3, indicating that The York Company found it necessary to sell $103.30 worth of merchandise to yield $100.00 in completed sales. The volume of returns is not unreasonably high, and might be considered very low for certain lines of business. One fundamental point mentioned before must be kept in mind also at this time — a study of any fact, factor, or result is practically worthless unless some standard or at least other similar case or set of figures is available for comparison. For, while 3% returns may be an excellently low figure for one business, another business might consider 10% very satisfactory.

Similarly we might observe that for the current year The York Company's net profit amounted to 7.34% of the net sales. This figure, too, can have significance only if compared with the results of another year's operation of The York Company. Such a comparative statement is now presented, after which a series of more or less commonly used observations will be discussed.

SOME OBSERVATIONS FROM COMPARATIVE INCOME STATEMENTS

TOTAL NET SALES

This figure should be given consideration by the management. In our case at hand the current year's net sales are $5000.00 greater than the last. The figure should be compared with that of the second year previous, too, in order to see if there is a steady improvement. Often Profit and Loss Statements for five years back will be compared in order to get a better view of the trend over a longer period.

COST OF GOODS SOLD

In this case, we note a rather unusual situation: the same dollar amounts for cost of goods sold; the percentage to net sales, however, is 58% in the current year against 60% the previous. The several items composing the cost of goods sold

might now be compared, and it will be noted that the separate items are very close in dollar value as well as percentages.

The York Company

Statement of Income Profit and Loss
for the Current Year

				%
Gross Income from Sales			$155,000.00	3.3
Less Returns & Allowances			5,000.00	103.3
Net Income from Sales			150,000.00	100.0
Less the Cost of Goods Sold:				
Old Inventory		$ 26,000.00		17.33
Add Purchases	$91,000.00		60.61	
Less Returns	2,000.00		1.33	
		89,000.00		59.28
Total Merch. Avail. for Sale		115,000.00		76.61
Less New Inventory		28,000.00		18.66
Cost of Goods Sold			87,000.00	58.00
Gross Profit			63,000.00	42.00
Deduct Selling Expense:				
Salesmen's Salaries		12,000.00		8.00
Advertising		10,000.00		6.67
Delivery Expense		3,200.00		2.13
Depreciation on Deliv. Equip.		1,400.00		.93
			26,600.00	17.73
			36,400.00	24.27
Deduct General and Administrative Expense:				
Office Salaries		9,000.00		6.00
Taxes		1,400.00		.93
Insurance		6,000.00		4.00
Telephone & Telegraph		800.00		.53
Heat & Light		1,300.00		.87
Dep. of Buildings		5,400.00		3.60
Dep. of Mach. & Equip.		1,500.00		1.00
			25,400.00	16.93
Net Profit			$ 11,000.00	7.34

GROSS PROFIT

This figure for the current year is $63,000.00 and for the year previous $58,000.00 or a gain of $5000.00. This gain is not so significant, however, when taken in respect to the total

THE YORK COMPANY

Statements of Income Profit and Loss Compared

	Current Year		Current Year Percentage of Net Sales	Last Year %	Last Year	
Gross Income from Sales:		155,000.00	103.3	102.5		148,600.00
Less Returns and Allowances		5,000.00	3.3	2.5		3,600.00
Net Income from Sales		150,000.00	100.00	100.0		145,000.00
Deduct the Cost of Goods Sold:						
Old Inventory	26,000.00		17.33	17.24	25,000.00	
Add Purchases (net)	89,000.00		59.28	60.69	88,000.00	
Total Available for Sale	115,000.00		76.61	77.93	113,000.00	
Less New Inventory	28,000.00		18.66	17.93	26,000.00	
Cost of Goods Sold		87,000.00	58 %	60 %		87,000.00
Gross Profit:		63,000.00	42 %	40 %		58,000.00
Deduct Selling Expenses:						
Salesmen's Salaries	12,000.00		8.00	6.89	10,000.00	
Advertising	10,000.00		6.67	6.21	9,000.00	
Delivery Expense	3,200.00		2.13	2.34	3,400.00	
Depreciation of Del. Equip.	1,400.00	26,600.00	.93	.96	1,400.00	23,800.00
			17.73	16.40		
Net Profit on Sales		36,400.00	24.27	23.60		34,200.00
Deduct Gen. and Admin. Exp.:						
Office Salaries	9,000.00		6.00	6.21	9,000.00	
Taxes	1,400.00		.93	.96	1,400.00	
Insurance	6,000.00		4.00	4.28	6,200.00	
Telephone and Telegraph	800.00		.53	.48	700.00	
Heat and Light	1,300.00		.87	.83	1,200.00	
Depreciation on Bldgs.	5,400.00		3.60	3.72	5,400.00	
Depreciation Mach. and Equip.	1,500.00		1.00	1.03	1,500.00	
		25,400.00	16.93	17.51		25,400.00
Net Profit for the Period		11,000.00	7.34	6.07		8,800.00

net sales for each year. The gross profit compared to net sales this year is 42%, whereas last year it was 40%, a slight difference in favor of the current year.

SELLING EXPENSES

The selling expenses advanced in the current year $2800.00 over those of the former year. This increase, however, seems to be justified due to the fact that a greater volume of sales was produced and, too, a greater percentage of net profit. It will be noted that the advertising figure is $1000.00 higher for the current year; this may be one of the factors causing the increase in sales. The delivery expense was actually lower, despite an increase in volume of sales in the current year, than in the previous year. This may be due to new equipment or more efficient handling of deliveries.

GENERAL AND ADMINISTRATIVE EXPENSE

A study of these items will reveal very little variation; as a matter of fact, the total for each year is the same. This brings out a very interesting point in management, a study of the so-called fixed and variable costs.

FIXED AND VARIABLE EXPENSES

It will be noted that the *Depreciation of Buildings,* also *Machinery and Equipment* is identical. This often happens when there has been no change in the fixed assets. The same rate of depreciation will be applied and, of course, the same "fixed" amounts will result. The office salaries, too, are the same for both years under review, but note that the salesmen's salaries have been increased in the current year $1000.00 over the past year. Salesmen's salaries, commissions, delivery costs, advertising, and items of this character are known as variables, because they will vary usually with the volume of business handled. Interest cost, management wages, taxes, and insurance, as well as depreciation referred to before, are usually fixed and cannot be reduced very much by management. For this reason every concern has certain "overhead costs of fixed ex-

penses" which it must meet before it can hope to make any profit. If the minimum amount of fixed expense is known, the company can usually figure just what its volume of business must be to "clear expenses." That is known as the "break-even" point. Any increase in sales volume beyond that point will ordinarily result in a net profit. Care must be taken, however, to see that the variables do not increase in a greater proportion than the increase in sales volume. Executives, controllers, and accountants have been giving a great deal of thought to this problem of late, and there is no doubt but that careful study of a company's expenses will yield much important information regarding a so-called "break-even" point. One of the problems involved, however, is to classify the so-called variable and fixed expenses. It is a rather hard task to make a rigid classification, for even such a fixed expense as rent must be increased after sales volume is increased beyond a certain point. Also some expenses increase in a more exact proportion to sales than do other variables.

OTHER RATIOS

NET PROFIT TO NET WORTH

This ratio is often studied and found helpful. It indicates whether or not the investment of the proprietors is being profitably employed. The York Company had a net worth in the current year of $184,000.00 and earned $11,000.00, yielding a return of slightly better than six per cent. This figure is certainly not a high figure, but the current general business conditions must be kept in mind, and a return of six per cent may be a fairly good return, everything else considered.

QUESTIONS ON THE CHAPTER

1. What do you understand by analysis?

2. (*a*) Name two groups other than the management interested in the study of financial statements.

 (*b*) What are some of the particular problems of each group?

3. It has been said that the proper valuation of assets has been very intimately connected with the interpretation of the balance sheet. Explain.

4. Which statement is the more valuable to the banker in deciding on the advisability of granting a loan application? Why? Explain.

5. Explain the advantages claimed for proper classification of accounts.
6. (*a*) Outline briefly a model classification.
   (*b*) What are its superior points?
7. Explain the procedure or technique of setting up a balance sheet on working paper for proper analysis.
8. Explain:
   (*a*) Working capital.
   (*b*) Current ratio.
   (*c*) Acid test ratio.
9. Give a good definition of current assets and current liabilities.
10. How should *Accounts Receivable* be displayed to aid in their evaluation?
11. How should *Notes Receivable* be displayed to aid in evaluation of this asset?
12. How should *Inventories* be classified and grouped to aid in their evaluation?
13. What advantages are there to the use of comparative balance sheets?
14. Discuss the study of a profit and loss statement.
   (*a*) Use of percentages as an aid in interpretation.
   (*b*) Comparative statements.
15. Discuss some of the important ratios taken from a study of comparative profit and loss statements. Give the significance of each.
16. Discuss fixed and variable expenses.
17. Explain *break-even point.*

PROBLEM MATERIAL

Problem 1

Condensed Balance Sheets are given below for two competing organizations:

The Harris Company

Current Assets	$ 40,000.00	Current Liabilities	$ 20,000.00
Fixed Assets	160,000.00	Fixed Liabilities	60,000.00
		Capital Stock	100,000.00
		Surplus	20,000.00
	$200,000.00		$200,000.00

The Forbes Company

Current Assets	$150,000.00	Current Liabilities	$100,000.00
Fixed Assets	200,000.00	Fixed Liabilities	130,000.00
		Capital Stock	100,000.00
		Surplus	20,000.00
	$350,000.00		$350,000.00

Required:

(1) The amount of working capital of each.
(2) The working capital ratio of each.
(3) Compare the two companies as to working capital, value of shares, etc.

PROBLEM 2

The following are the current assets and liabilities of the Sandow Company for the past three years:

	This Year	Last Year	Year Before Last
Current Assets			
Cash	$ 6,000.00	$ 4,000.00	$ 5,000.00
Accounts Receivable (Net of Res.)	16,000.00	14,000.00	12,000.00
Notes Receivable	4,000.00	5,000.00	6,000.00
Inventories	28,000.00	25,000.00	20,000.00
	$54,000.00	$48,000.00	$43,000.00
Current Liabilities	$25,000.00	$24,000.00	$23,000.00

Required:

(1) Compute the percentage each current asset bears to the total.
(2) Compute the current ratio for each year.
(3) What are some of the factors which might have caused this condition? Discuss.

PROBLEM 3

Given the following account titles, rearrange them in the best order to facilitate the preparation of financial statements:

Taxes, Purchases, Light, Heat and Power, Land and Buildings, Purchase Discounts, Cash, General Expense, Inventory Coal, Furniture and Fixtures, Notes Receivable, Sales, Petty Cash Fund, Depreciation of Delivery Equipment, Taxes Payable, Salaries of Salesmen, Return Sales, Accounts Receivable, Good-will, Royalty Expense, Depreciation of Buildings, Reserve for Depreciation of Delivery Equipment, Bonds Payable, Capital Stock, Freight and Cartage Inward, Mortgage Payable, Long-term Notes Receivable, Long-term Notes Payable, Reserve for Doubtful Accounts, Patent Rights, Temporary Investments, Inventory Merchandise New, Prepaid Insurance, Reserve for Depreciation of Buildings, Machinery and Equipment, Prepaid Advertising, Salaries Payable, Accounts Payable, Subscriptions Income, Subscriptions Received in Advance, Depreciation of Delivery Equipment, Return Purchases, Gas and Oil, Surplus, Travel Expense.

PROBLEM 4

The following trial balance is taken from the books of the Kirkland Company, Inc., at December 31, current year, followed by supplementary data required to adjust and close the books.

THE KIRKLAND COMPANY, INC., CURRENT YEAR

Acct. No.	*Account Title*	*Trial Balance*	
1	Cash	$ 6,420.00	
2	Petty Cash Fund	200.00	
3	Notes Receivable	3,400.00	
4	Accounts Receivable	46,000.00	
5	Reserve for Doubtful Accounts		$ 1,896.00
6	Delivery Equipment	13,600.00	
7	Land & Buildings	80,000.00	
8	Machinery & Equipment	66,000.00	
9	Inventory January 2	16,540.00	
10	Maintenance of Del. Equipment	148.00	
11	Purchases	68,750.00	
12	Purchase Returns & Allowances		1,120.00
13	Sales		114,450.00
14	Sales Returns	2,450.00	
15	Capital Stock		100,000.00
16	Surplus		13,382.00
17	Bonds Payable 6%		50,000.00
18	Notes Payable		8,500.00
19	Reserve Dep. Mach. & Equip.		2,800.00
20	Reserve Dep. Buildings		4,000.00
21	Reserve Dep. Delivery Equipment		4,600.00
22	General Office Expense	12,820.00	
23	Interest Income		624.00
24	Interest Expense	1,815.00	
25	Accounts Payable		29,161.00
26	Sales Expenses	12,390.00	
		$330,533.00	$330,533.00

Supplementary Data:

(1) The merchandise inventory at December 31 is $18,400.00.

Depreciation — Annual Rates:

(2) Buildings valued separately $70,000.00 — 2%

(3) Machinery & Equipment — 10%

(4) Delivery Equipment — 25%

(5) Increase the Reserve for Doubtful Accounts so that it shall equal 5% of Accounts Receivable.

(6) Accrue one-half of the Annual Bond Interest which will be payable January 2.

(7) A dividend of 3% on all shares outstanding was declared December 20 to holders of record December 31 and payable January 15.

Required:

(1) Adjust and close the books for the current year.
(2) Prepare a profit and loss statement for the current year.
(3) Prepare a balance sheet for the current year.

PROBLEM 5

The trial balance listed below is taken from the books of the Kirkland Company, Inc., at December 31 last year, together with supplementary data required to close and adjust the books at that time.

THE KIRKLAND COMPANY, INC. (LAST YEAR)

Acct. No.	*Account Title*	*Trial Balance*	
1	Cash	$ 5,800.00	
2	Petty Cash Fund	200.00	
3	Notes Receivable	3,600.00	
4	Accounts Receivable	42,000.00	
5	Reserve for Doubtful Accounts		$ 1,500.00
6	Delivery Equipment	12,000.00	
7	Land & Buildings	80,000.00	
8	Machinery & Equipment	18,000.00	
9	Inventory January 2	14,500.00	
10	Maintenance of Del. Equipment	360.00	
11	Purchases	62,140.00	
12	Purchase Returns & Allowances		1,140.00
13	Sales		107,660.00
14	Sales Returns	1,660.00	
15	Capital Stock		100,000.00
16	Surplus		7,282.00
17	Notes Payable		15,500.00
18	Reserve Dep. of Mach. Equip.		1,000.00
19	Reserve Dep. of Buildings		2,600.00
20	Reserve Dep. of Del. Equipment		1,600.00
21	Office Expense	16,482.00	
22	Interest Income		138.00
23	Interest Expense	110.00	
24	Accounts Payable		32,962.00
25	Sales Expenses	14,530.00	
		$271,382.00	$271,382.00

Supplementary Data:

(1) The New Inventory at December 31 is $16,540.00.
(2) Depreciation Machinery & Equipment — 10%.
(3) Depreciation Buildings valued separately $70,000 — 2%.
(4) Depreciation Delivery Equipment — 25%.
(5) Increase the Reserve for Doubtful Accounts $396.00.

(6) A dividend of 3% on all shares outstanding was declared December 20 to holders of record December 31 and payable January 15.

Required:

(1) Adjust and close the books for the last year.
(2) Prepare a profit and loss statement for the last year.
(3) Prepare a balance sheet for the last year.

Problem 6

Using the Kirkland Company balance sheet current year:

(1) Compute the ratio each asset and each liability bears to the total assets and liabilities.
(2) Compute the current ratio.
(3) Compute the acid test ratio.

Problem 7

Using the Kirkland Company balance sheet for the last year:

(1) Compute the ratio each asset and each liability bears to the total assets and liabilities.
(2) Compute the current ratio.
(3) Compute the acid test ratio.

Problem 8

Using the balance sheets of the Kirkland Company for the present and the past years, prepare a comparative balance sheet, showing increase or decrease in each item, in both amount and percentage.

Problem 9

Using the profit and loss statements of the Kirkland Company for the present and the past years, prepare a comparative profit and loss statement showing increase or decrease in each item in both amount and percentage.

COLLEGE BOOK SHOP

PRACTICE SET

Unit No. 1

September 2, 19—

Mr. J. M. Andrews, proprietor of the College Book Shop, asks you if you will take a part-time position in his store to help behind the counter and to operate a very simple set of books for him. He knows very little about bookkeeping and is satisfied with your suggestion to operate a General Journal and a standard Double Entry Ledger. He outlines to you what he has done to date as follows:

He has opened a bank account with the Peoples' Bank, depositing $2500.00, obtained as follows: $500.00 from his own funds and a check $2000.00, from his father, Thomas Andrews, who loans him this on a non-interest-bearing demand note.

He has drawn check No. 1, for $2.00, to order of County Clerk to register trade name "College Book Shop." Check No. 2, $75.00 is drawn to Middlesex Realty Company, rent for 1 month, September 1 to October 1, on vacant store at 240 Henry Street.

You accept the position, and record the transactions above under date of September 2, after which you journalize and post the following transactions:

September 3, 19—

He has installed show cases and other store equipment from N. Y. Office Supply Co., and is billed $840.00, net thirty days.

Mr. Andrews purchases a cash register from the International Business Machines Co., for $300.00, payable $50.00 down and $50.00 per month for five months. A check for $50.00 is drawn and a finance note is signed for the balance to be paid $50.00 each month starting October fourth.

He pays New Brunswick Decorating Company, $76.00 for painting and decorating store, check No. 4.

He pays $5.00, check No. 5, to Art Sign Co., for lettering on the windows.

September 4, 19—

A shipment of textbooks arrives from the Blue Book Company together with invoice $140.00, terms net 30 days.

A shipment of texts arrives from Merit Book Company — Net Cost $164.80, terms net 30 days.

N. Y. Stationery and Supply Co., shipment of stationery and supplies arrives $382.80, terms net 30 days.

He gives check No. 6, to *Daily News,* $40.00 for advertisement.

September 5, 19—

A shipment of advertising novelties which are to be given to cus-

tomers on opening day arrives from Metropolitan Advertising Co., cost $13.75 C.O.D., for which he draws check No. 7.

He pays cash, check No. 8, $12.00 for cleaning store preparatory to opening.

September 7, 19—

The store opens for business and the cash sales for the day were $124.50.

A shipment of books arrives from N. Y. Book Co. $642.00, terms 2/10 n/30.

Postage stamps are purchased, for which you cash check No. 9, $6.00.

(From this point forward you draw all checks for Mr. Andrews, and keep record of check numbers.)

September 9, 19—

Mr. Andrews asks you to draw a check for $75.00, and have it cashed for payroll.

Cash Sales for the day were $89.00.

A telegram arrives $1.50, collect, and you draw a check.

Mr. Andrews asks you if it is not possible to operate a Petty Cash Fund, and after you explain its operation, he authorizes you to draw a check for $25.00, to establish the fund.

September 10, 19—

Cash Sales for the day were $185.00.

A shipment of Sporting Goods arrives from Spaulding and Co., billed — $824.00, terms 2/10 n/30.

Mr. Andrews needs shelves and storage cabinets for the rear of the store, and receives a bid from the Unit Steel Co., of $800.00 for the equipment required. He feels he cannot afford steel equipment and has a carpenter construct them for him, paying cash for the following bills: to New Lumber Co. for lumber $180.00, to Strong Hardware Co. for hardware and paint $40.00, to carpenter and helper salary as per agreement $100.00.

September 11, 19—

Mr. Andrews asks you to pay the following accounts: Blue Book Company invoice of September 4th, Merit Book Company, invoice September 4th.

A student returns a textbook which is defective and you give him another which cost $2.80. You send the defective text back to the Blue Book Company, and request a credit memo.

Cash Sales for the day were $201.10.

September 12, 19—

Mr. Andrews has arranged a loan with his bank in amount of $1000.00. The bank takes his 60-day note and credits his account with $990.00.

An invoice from The City Sales Co., in amount of $120.00, terms 3/10 n/30, arrives with shipment.

Cash Sales for the day amount to $214.00.

September 13, 19—

Advertising for week is paid by check to *Daily News* \$40.00.

Received shipment from Metropolitan Envelope Supply Co., invoice \$36.00, terms 2/10 n/30.

A credit memo arrives from the Blue Book Company \$2.80 for text returned September 11.

Cash Sales for the day amount to \$210.00.

September 14, 19—

A salary check is drawn for \$75.00.

Cash Sales for the day amount to \$365.00.

September 16, 19—

Mr. Andrews approves for payment the following invoices:

September 3rd — N. Y. Office Supply Co.

September 4th — N. Y. Stationery and Supply Co.

Cash Sales for the day were \$115.00.

September 17, 19—

A shipment of books arrives from the Blue Book Company, invoice \$116.00, terms net 30 days.

A shipment of books also arrives from N. Y. Book Co., invoice \$146.00, terms 2/10 n/30.

Cash Sales for the day were \$189.00.

September 18, 19—

A shipment of sundries arrives from College Supply Co., \$78.00, terms 2/10 n/30.

A shipment from N. Y. Pen Supply Co., arrives \$320.00, terms 3/10 n/30.

Cash Sales for the day amount to \$215.00.

September 19, 19—

N. Y. Sporting Goods Co., shipment arrives \$820.00, terms 2/10 n/30. Several pens received yesterday were damaged, and had to be returned for credit, cost price \$12.60. (Make no entry until word is received from N. Y. Pen Supply Co.)

Merit Book Company shipment totaling \$120.00 is received, terms 2/10 n/30.

Cash Sales for the day total \$186.00.

September 20, 19—

A student returns a tennis racket split in play, and, after examination, you give him another, cost to you is \$6.00. Postage for an advertising circular is required, and check drawn for \$21.00 is cashed at the bank. Mimeographing Service Co., invoice for \$34.00 is received for advertising circular. Terms Net 30 days.

Cash Sales for the day amount to \$182.00.

September 21, 19—

You send broken tennis racket back to N. Y. Sporting Goods Co. together with a letter requesting proper credit. (No entry until word is received from company.)

Cash Sales for the day amount to \$119.00.

September 23, 19—

Mr. Andrews asks you to pay the following bills: Metropolitan Envelope Supply Co., September 13th, less discount, and City Sales Invoice, September 12th, less discount.

A credit memo is received from N. Y. Pen Supply Co., total $13.00; $12.60 for pens, 40¢ postage on returned package.

Weekly Advertisement $40.00 is paid to *Daily News*.

Salary check $75.00 is drawn for week, ending September 21st.

Cash Sales for the day were $296.00.

September 24, 19—

Mr. Andrews asks you to draw a $15.00 check for advertisement in college football program.

Mr. Andrews instructs you to pay the Blue Book Company, invoice of September 17th, less credit memo; and invoice of September 17th, of N. Y. Book Co., less the discount, and to give a 60-day note to N. Y. Book Company for invoice of September 7th.

A new typewriter is purchased from the International Business Machines Co., $125.00, terms 2% for cash in 30 days, or Net 60 days.

An office desk is purchased from local used-furniture company $18.00 cash — draw check to Cash.

Cash Sales for the day were $214.00.

September 25, 19—

A credit memo arrives from the N. Y. Sporting Goods Co. for $6.00, full allowance for racket returned.

A shipment of 250 gallons of fuel oil is received from the Plainfield Oil Co., 7¢ a gallon, net 30 days.

One textbook is returned by student and another given in place, cost $2.80, book is returned to the Blue Book Company for credit.

Cash Sales for the day amount to $210.00.

September 26, 19—

Mr. Andrews asks you to pay N. Y. Pen Co., invoice of September 18, less credit memo and discount.

Paid $12.00 by check for services to oil burner.

Paid $16.00 by check for window cleaning to date.

Cash Sales for the day were $185.00.

September 27, 19—

A check in amount of $20.00 received from Thomas Brown, a student, is returned from our bank marked " insufficient funds " together with protest charges of $2.40. Mr. Andrews phones Brown who promises to pay next day.

A shipment arrives from the N. Y. Sporting Goods Co., in amount of $126.00, Terms 2/10 n/30.

Cash Sales for the day were $216.00.

September 28, 19—

Drew salary check for week $75.00.

Paid *Daily News* $40.00 for advertisement.

Cash Sales for day $110.00.

Received $22.40 in cash from Mr. Brown for protested check.

September 30, 19—

Mr. Andrews instructs you to pay the Merit Book Company, invoice September 19, less discount.

Your Petty Cash Fund is $2.60, and vouchers total $22.40, which you classify as follows:

Postage	$ 6.18
Express	8.12
Tel. & Tel.	2.80
General Expense	5.30
	$22.40

Draw a reimbursing check debiting the above accounts, as indicated.

Cash Sales for the day were $125.60.

Required:

(1) Journalize the foregoing transactions in a standard two column general journal.

(2) Post the journal to a standard ledger. Allow one page for the cash account, the sales account, and for purchases; all other accounts four to a page.

(3) Take a trial balance of the general ledger.

Practice Set

Unit No. 2

To be used after Chapter on Special Journals has been completed.

Mr. Andrews has decided to expand his business and has arranged with several wholesale companies to act as their agent in New Brunswick and vicinity. He wishes his Purchases and Sales classified as "Books and Stationery" and "Sporting Goods and Sundries."

The Purchases account in total, September 30, was $4024.00 and is analyzed "Books and Stationery" $1826.50, "Sporting Goods and Sundries" $2197.50. Write a Journal Entry, closing the old Purchases account and open two new Purchases accounts, as indicated above.

The Sales Account is similarly analyzed, "Books and Stationery," $2240.00, "Sporting Goods and Sundries" $1511.20 and is also to be closed by a Journal Entry opening two Sales accounts for the two departments.

The Bookkeeper installs four special journals as follows:

(1) A Cash Receipts Book, designed to record all cash received, with the following layout: Date, Account Credit, Explanation, Folio, Total Amount, Discount on Sales, and Net Cash Received.

(2) A Cash Disbursements Book, designed to record all cash paid out with the following layout: Date, Account Debit, Explanation, Folio, Total Amount, Discount on Purchases, and Net Cash Paid.

(3) A Sales Journal to record all Sales and laid out as follows: Date, Account Debit, Explanation, Folio, Books and Stationery, Sporting Goods and Sundries.

(4) A Purchase Journal to record all purchases and laid out as follows: Date, Account Credit, Explanation, Folio, Books and Stationery, Sporting Goods and Sundries.

The General Journal will be continued, but only for those transactions which cannot be entered in the special journals.

Using the special journals above which are purchased from Petty Cash, record the following transactions, October 1 to 15, inclusive.

October 1, 19—

Purchased sporting goods from Spaulding and Co., terms 2/10 n/30, total $213.00.

The following sales were made on account. Middlesex Junior College — Books and Stationery — $116.00, Net 30 days.

Johnson and Johnson — Stationery $64.00, terms 2/10 n/30.

Thomas Haggerty — Stationery — $180.00, terms 2/10 n/30.

The Cash Sales for the day were — Books and Stationery, $45.00, and Sporting Goods and Sundries, $10.00, — in future all Sales of Books and Stationery will be designated (1), and Sporting Goods and Sundries designated (2).

October 2, 19—

The following accounts are paid net — Spaulding, invoice, September 10 — $824.00; Rent one month $75.00. First payment to International Business Machines Co., on Note due today, $50.00.

The following sales were made on account:

N. B. High School — Sporting Goods, $210.00, Net 30 days.

South River Board of Education — Books and Stationery, $110.00, net 30 Days.

South River Athletic Association — Sporting Goods $240.00, net 30 days.

The Cash Sales for the day were (1) $16.00; (2) $62.00.

Invoice Received from N. Y. Office Supply Co., Stationery $428.00 and Sundry Items $36.00, terms 2/10 n/30.

October 3, 19—

Sold to Middlesex Junior College Books $85.00, terms 2/10 n/30.

Cash Sales for the day were (1) $64.00; (2) $51.00.

Invoice received from N. Y. Sporting Goods Co., $160.00, terms 2/10 n/30.

Gave our check to College Supply Co., for invoice September 18, net $78.00.

October 4, 19—

Sold on account to: Johnson and Johnson, Stationery $48.00, terms 2/10 n/30.

Rutgers Athletic Association, sporting goods $60.00, net 30 days.

Cash Sales for the day were (1) $60.00, (2) $92.00.

Purchased from City Sales sundries $38.00, 2/10 n/30.

Sent our check to N. Y. Sporting Goods Co., $440.00 and our 60-day non-interest-bearing note for $500.00 in full payment of our account, invoices September 19 and 27.

October 5, 19—

Received check $176.40 payment in full invoice, October 1, Thomas Haggerty.

Sold to N. B. High School, sporting goods $16.00, net 30 days.

Paid salaries for week by check $75.00.

October 7, 19—

Paid Mimeographing Service Co. account in full $34.00.

Cash Sales for 5th and 7th were (1) $114.00, (2) $93.00.

Sold Books to South River Board of Education, $23.00, net 30 days.

Received check from Johnson and Johnson, full settlement of invoice, October 1.

October 8, 19—

Sold Stationery to National Bank of N. J., $60.00, Terms 2/10 n/30.

Received check from South River Board of Education, invoice of October 2 in full.

Cash Sales for day were (1) $45.00, (2) $18.00.

Purchased Envelopes from Metropolitan Envelope Supply Co., $142.00, Terms 2/10 n/30.

October 9, 19—

Sold stationery to Beck Shoe Store, $16.00, terms 2/10 n/30.

Sold to Middlesex Junior College texts, $72.00, terms net 30 days.

Accepted offer from *Home News,* we to pay them $120.00 for four weeks, advertising in advance, and issued check accordingly.

October 10, 19—

Purchased a light delivery truck from Rutgers Chevrolet Co., full price $865.00. They accept our check for $300.00 and our ten-month note for the balance, payable $56.50 per month.

Drew a check $86.00 to Frank Merritt, Insurance broker, for fire, theft, and public liability insurance on new truck.

Gave a check to Spaulding and Co., $208.74, full payment of their invoice October 1.

Received a check from New Brunswick High School, invoice of October 2, in full.

Purchased athletic equipment from Spaulding and Co., $475.00, terms 2/10 n/30.

Purchased Sundry items from College Supply Co., $190.00 with special terms 3/10 n/30.

Cash Sales for 9th and 10th were (1) $110.00, (2) $48.00.

October 11, 19—

Sold stationery to Thomas Haggerty $21.00, Terms 2/10 n/30.

Sent our check $454.72 to N. Y. Office Supply Co. in full settlement invoice, October 2.

Received a check $47.04 from Johnson and Johnson, invoice, October 4, in full.

Received invoice from the Blue Book Company for texts $260.00, net 30 days.

Received invoice from the Merit Book Company for texts $281.00, net 30 days.

October 12, 19—

We returned novelties received in damaged condition, and received a credit memo from College Supply Co., cost — $12.40.

Drew check $75.00 weekly salaries.

Sold athletic equipment to South River Athletic Association $64.00, net 30 days.

Cash Sales for October 11 and 12, were (1) $140.00, (2) $31.00.

October 13, 19—

Received a check from Beck Shoe Store, $15.68, full payment of invoice of October 9.

Invoices received from N. Y. Book Co., texts $296.00, net 30 days, and from N. Y. Sporting Goods Co. — Golf Equipment $125.00, terms 2/10 n/30.

October 14, 19—

Sold athletic equipment to Rutgers Athletic Association $72.00 net 30 days.

Cash Sales for 13th and 14th were (1) $70.00, (2) $49.00.

Gave Plainfield Oil Co. our check $17.50, and received a delivery of fuel oil 200 gals., at 6 cents, terms net 30 days.

Received a check $58.80 from National Bank of N. J., full settlement of invoice October 8.

October 15, 19—

Sold stationery to Beck Shoe Store $64.00, terms 2/10 n/30.

Gave our check to City Sales $37.24, full payment, invoice October 4, and our check to George Street Service Station $22.00, for gas and oil account to date.

Cash Sales for today were — (1) $22.00 and (2) $18.00.

Required:

(1) Total all books of original entry. (These totals will be checked in class.)

(2) Post all books of original entry to the general ledger. Use the same accounts as before, opening new accounts as required.

(3) Take a trial balance of the general ledger as of October 15.

Practice Set

Unit No. 3

To be used after Controlling Accounts have been presented.

October 16, 19—

Mr. Andrews has agreed that it would be a good idea to establish an Accounts Receivable Ledger and an Accounts Payable Ledger, and establish appropriate controlling accounts in the General Ledger to take the place of the individual accounts transferred.

With this change in mind, you design five special journals as follows:

(1) A Purchase Book with column headings from left to right as follows: Date, Account Credit, Explanation, Folio, Accounts Payable Cr., Books and Stationery Dr., Sporting Goods and Sundries Dr.

(2) A Sales Book with column headings from left to right as follows: Date, Account Debit, Explanation, Folio, Accounts Receivable Dr., Cash Sales Dr., Books and Stationery Cr., Sporting Goods and Sundries Cr.

(3) A Cash Receipts Book with column headings from left to right as follows: Date, Account Credit, Explanation, Folio, General Ledger Cr., Cash Sales Cr., Accounts Receivable Ledger Cr., Sales Discounts Dr., Net Cash Received Dr.

(4) A Cash Disbursements Book with column headings from left to right as follows: Date, Account Debit, Explanation, Folio, General Ledger Dr., Accounts Payable Dr., Purchase Discounts Cr., Net Cash Paid Cr.

(5) A six-column General Journal ruled as follows: the three debit money columns headed from left to right; Accounts Receivable Ledger, Accounts Payable Ledger, General Ledger. The three credit columns to be headed left to right as follows; General Ledger, Accounts Receivable Ledger, Accounts Payable Ledger.

In the General Journal write an entry; a debit to the Accounts Receivable Controlling Account in the General Ledger debit column equal to the total of all customers' account balances, and in the General Ledger credit column a credit to each customer's account individually. When this entry has been posted to the General Ledger, all customers' accounts will be closed and an Accounts Receivable Controlling Account will be established in their place, with a single debit balance equal to total of all customers' accounts transferred. In the back of your Ledger insert a " tab " marked " Accounts Receivable Ledger " and open the customers' accounts there, four accounts to a page. In the same manner write a second journal entry; a debit to each of the Accounts Payable individually and a credit to the Ac-

counts Payable Controlling Account for an amount equal to the sum of all creditors' accounts closed. When this entry has been posted to the General Ledger, all creditors' accounts will be closed and an Accounts Payable Controlling Account will be established in their place, with a single credit balance equal to the total of all creditors' accounts transferred. Directly following the " Accounts Receivable Ledger," insert a " tab " marked " Accounts Payable Ledger," and open the creditors' accounts there, four to a page.

After the new journals have been ruled, and the two journal entries just outlined written, and the subsidiary ledgers established as described, enter the following selected transactions:

October 16, 19—

A purchase of texts, your order No. 250 from the Blue Book Company, arrived terms net 30 days, amount $240.00. Sold textbooks invoice No. 100 to the Middlesex Junior College $127.00. Gave the Blue Book Company our 60-day 6% note in amount of $260.00 payment of invoice of October 11 in full. Gave a 60-day 6% note to Spaulding and Co. in amount of $475.00 payment of their invoice October 10 in full. Mr. Andrews requests you to pay the College Supply Co. invoice of October 10 in full less the 3% discount.

October 17, 19—

Mr. Andrews instructs you to pay the following invoices: Metropolitan Envelope Supply Co., October 8 less 2%; N. Y. Sporting Goods Co., invoice of October 3 net and October 13 less 2%; Plainfield Oil Co., October 14 net. Purchased stationery, order No. 251, from the Metropolitan Envelope Supply Co. amount $68.00 terms 2/10 n/30.

October 18, 19—

Sold texts invoice 101 to New Brunswick High School $240.00. Sold texts to South River Board of Education invoice 102 in amount $118.00. Purchased sundry items your order No. 252, from the College Supply Co., amount $119.00 terms 3/10 n/30. Paid by check $12.00 for cleaning store. Received a check from Thomas Haggerty for $21.00 payment of his account in full. Received a check for $64.00 from the Beck Shoe Co., their account in full to date. Cash Sales for the 16th and 17th were (1) $60.00 and (2) $45.00 (enter in Cash Receipts Book and Sales Book).

October 19, 19—

Drew a check $75.00 for Salaries. Received a check from Rutgers Athletic Association amount $129.36 full payment invoice October 16. Borrowed from the Peoples Bank, discounting a 60-day note for $1500.00. (Enter in General Journal and Cash Receipts Book.)

October 20, 19—

Cash Sales for 18th and 19th were (1) $42.00 and (2) $15.00. Sold to Johnson and Johnson stationery invoice 103, amount $44.00. Received checks as follows: $16.00 from New Brunswick High School invoice October 5 in full; $23.00 from South River Board of Education invoice October 7 in full; $297.92 from South River Athletic As-

sociation invoice of October 16 in full. Received a credit memo from the College Supply Co. $16.00 for merchandise returned.

October 22, 19—

Sold texts invoice 104 to Middlesex Junior College $94.00. Sold athletic equipment to the South River Athletic Association $610.00 invoice 105. Received a check for $267.54 from the Middlesex Junior College their account in full less 2% a special discount which we allow. Purchased a new typewriter from the International Business Machines Co. $110.00 terms 2/10 n/30.

October 23, 19—

Cash Sales for 20th and 22nd were (1) $84.00 and (2) $38.00. Purchased Sporting goods invoice 253, $118.00 from N. Y. Sporting Goods Co. Issued a credit memo to the South River Athletic Association $36.00 surplus equipment returned as per agreement.

October 24, 19—

Purchased texts invoice No. 256 from N. Y. Book Co. amount $118.00 terms net 30 days. Gave our check $103.21 to N. Y. Book Co., to apply $100.00 on note and $3.21 interest to date. Sold to the Rutgers Athletic Association equipment $285.00 terms 2/10 n/30.

October 25, 19—

Cash Sales for 23rd and 24th were (1) $49.00 and (2) $52.00. Sold stationery to Johnson and Johnson $92.00 invoice No. 107. Received a check $124.46 from the Middlesex Junior College invoice October 16 less the discount. Issued a credit memo to the Rutgers Athletic Association for equipment returned $54.00. Paid the following invoices: Merit Book Company, October 11 net; N. Y. Book Co., October 13 net.

October 26, 19—

Sold invoice 108 to Community Playground, equipment $320.00 and accepted their note for $320.00 — six per cent, sixty days. (Enter invoice in Sales Book and Note in Journal.) Received the following checks: New Brunswick High School invoice October 18 less 2% $235.20; South River Board of Education invoice October 18 less 2% $115.64. The Peoples Bank discounted the note for $320.00 received from the Community Playground. (Enter in both the Journal and the Cash Receipts Book.) Drew a salary check $75.00. Purchased texts from Merit Book Company Order No. 255 amount $120.00 terms net 30 days.

October 27, 19—

Cash Sales for 25th and 26th were (1) $64.00 and (2) $55.00. Sold stationery $24.00 invoice No. 109 to New Brunswick High School. Gave the College Supply Co. our check $100.94 payment invoice October 18th less credit memo. and discount. Purchased equipment from Spaulding and Co. Order No. 257, amount $720.00.

October 29, 19—

Received a credit memo. from the Merit Book Company for surplus texts returned to them $32.00. Also received a credit memo from Spaulding and Co. for $16.00, defective equipment returned

as per agreement. Cash Sales 27th and 28th were (1) $83.00 and (2) $25.00. Sold to the Middlesex Junior College practice sets, invoice No. 110 $35.00 terms net 30 days. Sold to South River Athletic Association equipment invoice No. 111 amount $200.00 terms 2/10 n/30.

October 30, 19—

Received a shipment of fuel oil from Plainfield Oil Co., our Order No. 258, 450 gals. at 6¢, terms net 30 days. Cash Sales for 29th and 30th were (1) $30.00 and (2) $55.00. Received a check $43.12 from Johnson & Johnson payment in full invoice October 20th. Sold texts invoice 112 to South River Board of Education $116.00. Sold athletic equipment to the New Brunswick High School invoice 113 amount $115.00 terms 2/10 n/30.

October 31, 19—

Paid by check Telephone bill to date $16.40. Gave a reimbursing check in amount of $21.70 to clerk for petty cash expenditures to date. Charge the following accounts:

General Expense	$ 3.20
Postage	6.00
Telephone & Telegraph	8.00
Express	4.50
	$21.70

Required:

(1) Total all books of original entry. The totals will be checked in class.

(2) Post all the journals.

(3) Prove the total of all subsidiary ledger account balances of the two subsidiary ledgers with their respective controlling accounts.

(4) Take a trial balance of the general ledger at October 31.

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